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# THE AMERICAN ELEVATOR AND GRAIN TRADE.

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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
MITCHELL BROS. COMPANY  
(INCORPORATED).

VOL. XXIV.

CHICAGO, ILLINOIS, SEPTEMBER 15, 1905.

NO. 3. { ONE DOLLAR PER ANNUM,  
SINGLE COPY, TEN CENTS.

**Stephens-Adamson Mfg. Co.**

AURORA ILLINOIS

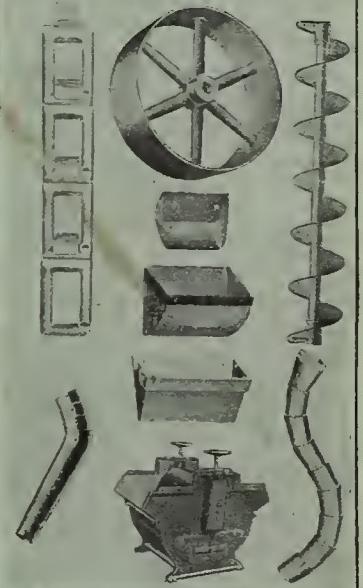
Manufacturers of the  
**Highest Grade Grain  
Handling Machinery**

CHICAGO OFFICE: FIRST NATIONAL BANK BLDG.

We Are Manufacturers  
of  
**Elevating and  
Conveying  
Machinery**

For repairs or complete equipments, get  
our prices—they will interest you.

**BURRELL MFG. CO.**  
BRADLEY, ILL.



YOU NEED A  
Muir Improved  
**Friction Clutch  
Pulley**

Great power in small space;  
long life; ease of adjustment.  
We carry them in stock and  
guarantee every one. The  
only friction clutch for clipper  
and cleaner drives, because  
they can be adjusted  
while the shaft is running.

**Skillin & Richards Mfg. Co., Chicago**

We are originators and manufacturers of

**Cold Rolled Spiral Steel Conveyor**

Made interchangeable with other kinds, but wears much better. **Cold rolled**—which means that the steel has not been softened in the furnace and dropped into shape. Costs no more than other kinds.



We make all kinds of **MACHINERY FOR GRAIN ELEVATORS**. We send Pinch Bars on trial. Our Sprocket Wheels and Chain are the best. We also make Pulleys, Shafting, Hangers, Car-loading Spouts, etc. Write for Catalogue.

**SALEM BUCKETS  
ARE GOOD ONES**

We manufacture in large quantities, carry all sizes in stock and make prices that are hard to beat. Send us your next order.



**ALFALFA**

The Williams Pat. Alfalfa Hay

**CUTTER and GRINDER**

Write For Bulletin No. 6.

**THE WILLIAMS PAT. CRUSHER & PULVERIZER CO.**  
2705 N. Broadway, St. Louis, Mo.

**HOLD**

your order for a power outfit until you have looked into the merits of our

**LEFFEL ENGINES and  
BOILERS**

The small upright shown here is but one of the large number of styles and sizes we make. This one is specially adapted to use where space for setting is limited. It is a perfect power for

**GRINDING, SHELLING, ELEVATING, ETC.**

Very simple, safe and efficient. Takes but little fuel, waste cobs furnishing more than enough. Don't buy a power of any kind until you write us for estimates, etc. Send for our free book, "Power Economy and Efficiency."

**JAMES LEFFEL & CO., Box 158, Springfield, Ohio**

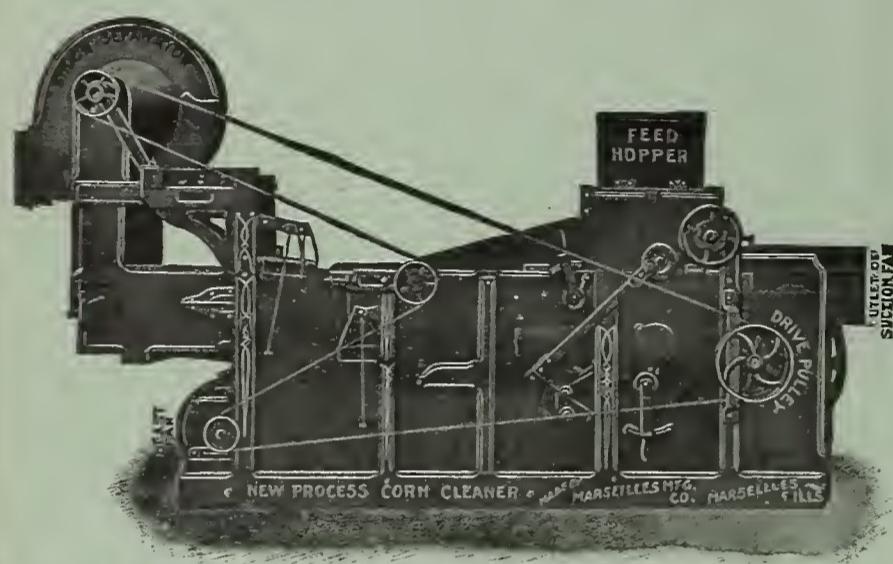
# Corn Shellers? Do We Make 'Em?

*Well, just ask us for a copy  
of our Catalogue No. 35*

IT tells all about the best and most complete line of Corn Shelling Machinery manufactured. We make Shellers and Cleaners as separate machines. Also a complete line of

## Combined Shellers and Cleaners

for shelling both husked and unhusked corn.



NEW PROCESS CORN CLEANER, WITH SHUCK SEPARATING FAN.



NEW PROCESS CORN SHELLER ONLY.

The New Process Combined Shuck Sheller and Cleaner is the only machine that can be fitted for either husked corn of Northern States or the unhusked corn of Southern States.

*If you're going to buy a Corn Sheller  
or Corn Cleaner, get a New Process.*

We are also manufacturers of Power Transmission Appliances and Grain Elevating and Conveying Machinery. We solicit specifications and the privilege of quoting on any requirements in this line.

**Marseilles Mfg. Co.** MARSEILLES,  
ILLINOIS.  
BRANCHES

Peoria, Ill.

Council Bluffs and Cedar Rapids, Ia.

Kansas City, Mo.

## BUY FROM THE MAKER

**OUR SPECIALTY**

# GRAIN ELEVATOR MACHINERY

Friction Clutch Pulleys,  
Manila Rope Transmission,  
Power Shovels, Car Pullers,  
Boot Tanks, Boilers,  
Atlas Steam Engines.

*When in the market let us hear from you.*

## LINK-BELT SUPPLY COMPANY

MINNEAPOLIS, MINN.

# Cyclone Dust Collector



MANUFACTURED BY

**The Knickerbocker Co.**

JACKSON, MICH.

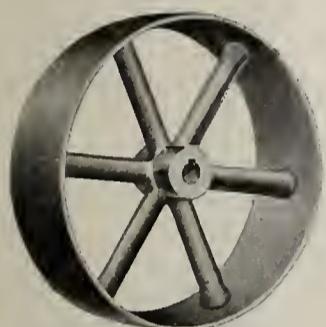
## MODERN ELEVATING, CONVEYING AND POWER TRANSMISSION MACHINERY



We manufacture one of the most complete lines in the country.

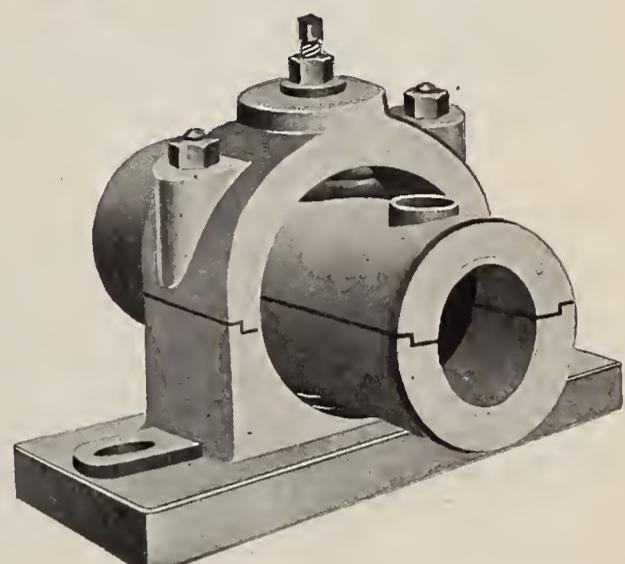
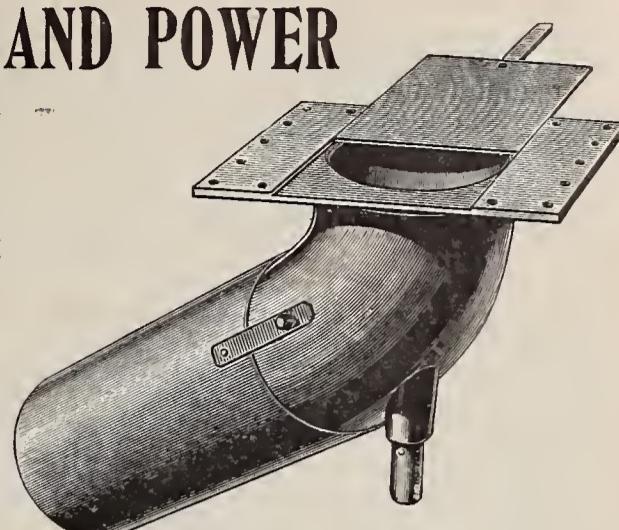
We make prompt shipments and quote low prices.

When in the market for Shafting, Pulleys, Bearings, Rope Sheaves, Boots, Buckets, Belting, Spouting, Etc., write us. You will find us in line.



Our machinery is growing rapidly in popularity among the grain trade throughout the country.

Catalogues upon request.



Kingsland-Kay-Cook Mfg. Co. - St. Louis

## THE HESS GRAIN DRIER

*Makes Money  
Saves Money*

*Necessary to all up-to-date  
grain elevators*

**USED EVERYWHERE**

*Free Booklet*

*Send for one*

**Hess Warming & Ventilating Co.**

710 Tacoma Bldg., CHICAGO

### My Dear Reader—

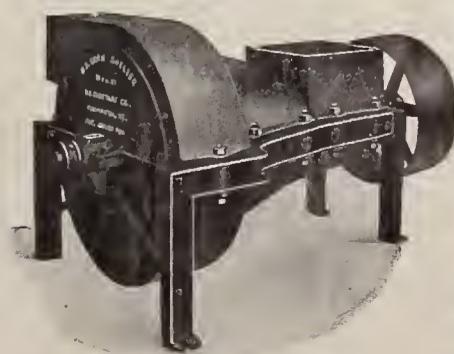
I am pleased to inform you that I have granted Letters Patent to this firm on the improvements found in

### The U. S. Corn Sheller

Listen to your Uncle Sam, who always gives valuable advice. The quickest way for you to make money with the least worry is to buy Labor Saving Machinery. This sheller is all iron and will save you more than its cost in the start, as no cemented pit, steel tank or lower hoppering is required. Boot sets up on a level with the sheller and when fed with

### The B. S. C. Chain Drag

you have the best outfit going. Use their Wagon Dumps, either Platform or Self-locking Rail, and avoid trouble over damaged horseflesh and wagons. Trade Winners.



Complete  
Equipments  
FOR  
Grain  
Elevators

at prices which  
will interest you.  
Satisfaction  
guaranteed.  
Write at once  
and save delays.  
Just Address Them.



**B. S. CONSTANT CO.**  
BLOOMINGTON, ILL.

They Will Send a Catalogue and FILL Your Orders PROMPTLY

# Correct Weights

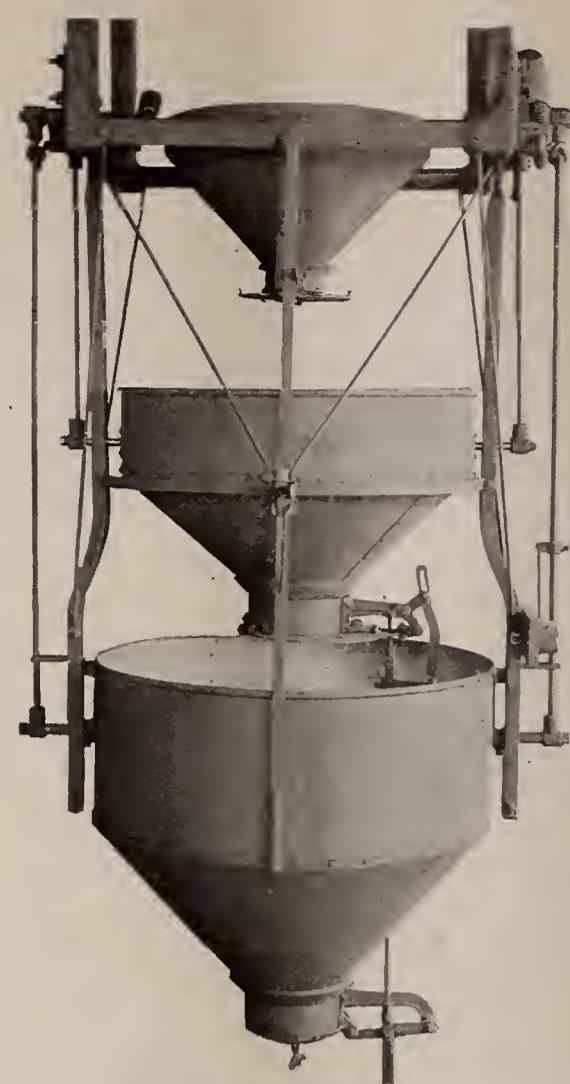
The Bowlus Automatic Weighing Machine will weigh out your grain accurately to the pound, and will dump and register the weight without the services of a weighman. It works automatically and can be adjusted to dump at any weight. Its salient features are

**Accuracy  
Simplicity  
Durability**

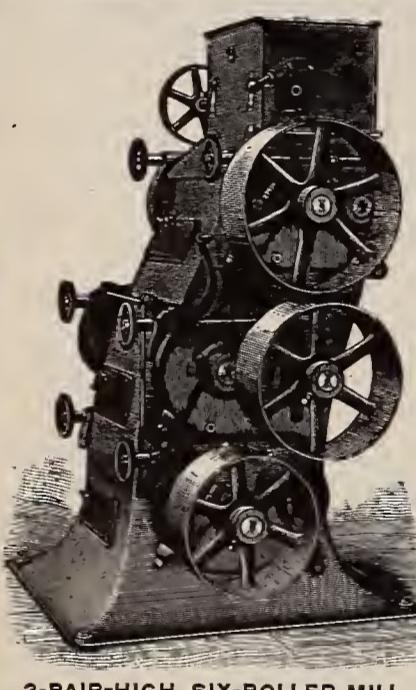
Machine to weigh out 60,000 pounds of any grain per hour goes in space 7 feet high by 4 feet square.

Write for catalog and detailed description

**The Bowlus Automatic Scale Co.**  
Springfield, Ohio, U. S. A.



SIDE VIEW



3-PAIR-HIGH, SIX-ROLLER MILL.

## CUSTOM WORK!

UTILIZE YOUR POWER  
BY OPERATING A GOOD MILL FOR GRINDING

**...FEED AND MEAL...**  
IT PAYS

WE MANUFACTURE  
THREE-ROLL, TWO-BREAK MILLS, 2 Sizes.  
THREE-PAIR HIGH, SIX-ROLLER MILLS, 4 Sizes.  
TWO-PAIR HIGH, FOUR-ROLLER MILLS, 5 Sizes,  
...And...  
PORTABLE FRENCH BUHR MILLS,  
85 Sizes and Styles.  
SEND FOR BOOK ON MILLS.



VERTICAL  
UNDER RUNNERS,  
UPPER RUNNERS,  
PULLEY AND GEAR DRIVES.

## ELEVATOR SUPPLIES AND POWER CONNECTIONS.

ROPE DRIVES, GEARING, CORN SHELLERS and CLEANERS, GRAIN CLEANERS.

### DUST COLLECTORS (Tubular, Automatic).

#### CUPS.

We manufacture Elevator Cups for all purposes, and make a greater number of sizes than found in any standard list. Our Cups have greater capacity than others of same rated size; for instance, our  $3\frac{1}{2} \times 3$  inch, list price 9c., has as much capacity as others  $3\frac{1}{2} \times 3\frac{1}{2}$  inch, list price 10c. Our prices are right.

CORRESPONDENCE SOLICITED.

NORDYKE & MARMON CO.,

INDIANAPOLIS, INDIANA, U. S. A.

FLOURING MILL ENGINEERS, IRON FOUNDERS AND MACHINISTS. ESTABLISHED 1851.



"Western" Warehouse Sheller

Are You Building a New Elevator?  
Are You Remodeling Your Old One?

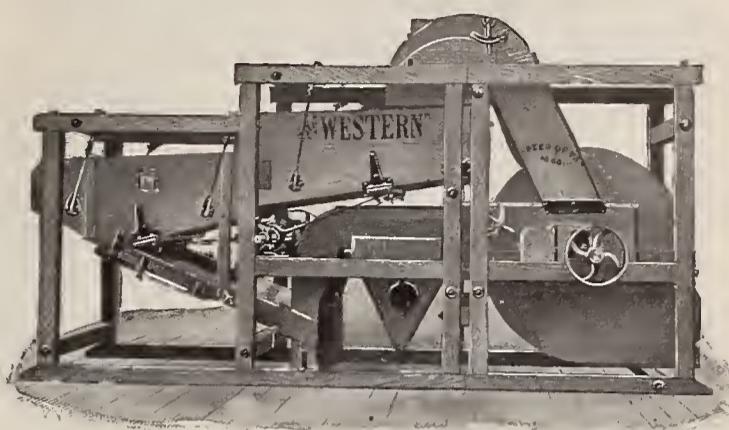
IF SO, EQUIP IT WITH

## "Western" Machinery

Plans furnished  
upon application

WRITE FOR CATALOG WITH CUTS AND FULL  
DESCRIPTIONS TO

**UNION IRON WORKS**  
DECATUR, ILL.



"Western" Shaker Cleaner

### A GOOD CAR LOADER

is a necessary part of the equipment of a modern grain elevator.

#### THE BOSS CAR LOADER

Is the best device of its class. Its installation means a positive saving in loading out your grain. If you will write us to-day we will send you full particulars and tell you why you cannot afford to use any other loader.

MAROA MFG. CO.

Maroa, Ill.

### SCIENTIFIC IN SIMPLICITY UNRIValed IN EFFICIENCY

#### *The Standard of the Trade*

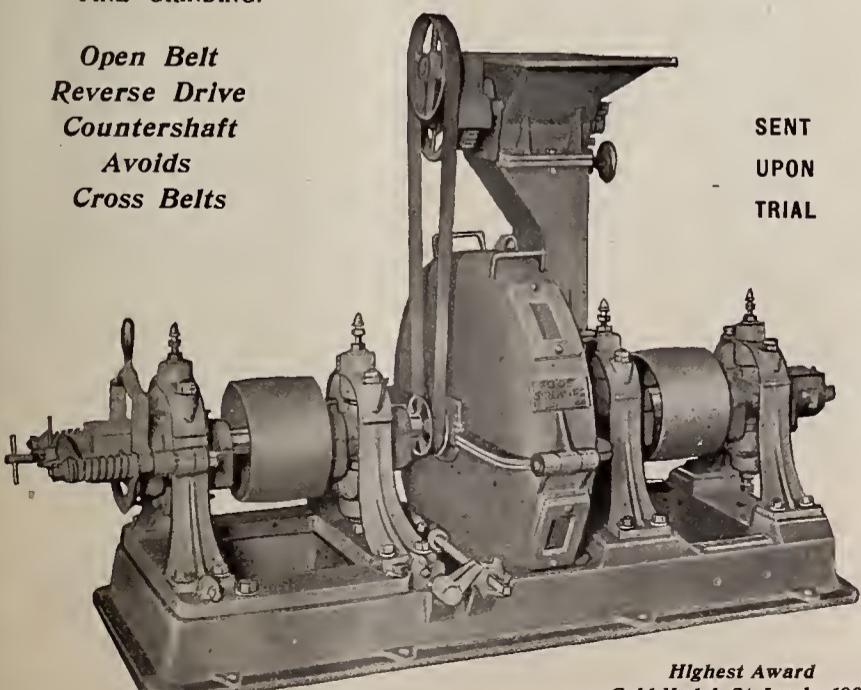
Modern in design—perfect in detail—correct in construction

### Less Power AND More Work

Interchangeable ring oiling bearings, quick release, automatic relief springs, duplex ball bearings, force feed, renewable eye to feeding head, quick plate changing device, EASIEST TRAMMED MILL.

Grinds ear corn, chop feed, bran, offal, cracks corn, etc., FAST.  
**FINE GRINDING.**

Open Belt  
Reverse Drive  
Countershaft  
Avoide  
Cross Belts



SENT  
UPON  
TRIAL

Highest Award  
Gold Medal, St. Louis, 1904

THE FOOS MFG. CO. EST. 1878 Springfield, Ohio

### The Easy Starting Lauson

A simple and reliable Gasoline Engine that is perfect in every detail. It is free from trappy and delicate parts that are liable to cause trouble. It will start as easy and work as well at 20 below zero as in warm weather. Write for our 1905 catalog describing our line of stationary and portable Engines from 2 to 20 H. P.

The John Lauson Manufacturing Co.  
New Holstein, Wis.

*American*

THE AMERICAN MFG. CO.  
MANILA - SISAL - JUTE CORDAGE  
65 WALL ST., NEW YORK



### BEHIND "AMERICAN" CORDAGE

Stand the largest and best equipped Rope and Twine Mills in the U. S. Uniformity in quality and workmanship assured.

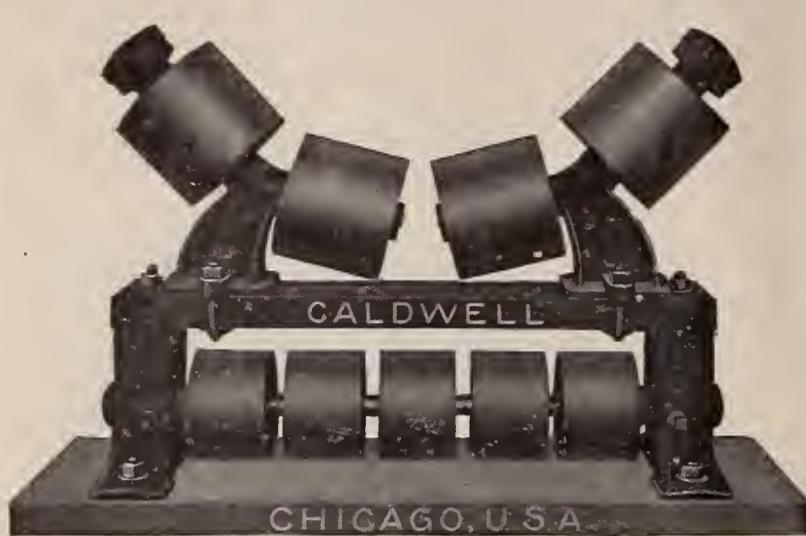
### "AMERICAN" TRANSMISSION R O P E

*"The Rope to Remember"*

We carry the largest stock of Transmission Rope west of the Alleghanies at our Chicago Branch, 85 Kinzie Street. Orders any diameter or length promptly filled.

The Blue Book of Rope Transmission sent free upon request.

*See Ropes*



## Improved Belt Conveyor

Carries all kinds of grain and mill products in package or bulk. Gradual, uniform curve of belt secured without complicated parts. Bearings thoroughly lubricated and have adjustment for taking up wear. Tripper substantial and reliable. Entire system economical and satisfactory—nothing to get out of order.

We manufacture a complete line of Elevating, Conveying and Power-Transmitting Machinery. Headquarters for supplies.

**H. W. Caldwell & Son Co.**  
Chicago, Western Ave., 17th-18th Sts.

New York, 95 Liberty St.  
Woodward, Wight & Co., Ltd., New Orleans, La.

### What we hear from "LEVIATHAN" users

"Replying to your inquiry of recent date with reference to the lasting qualities of a Leviathan belt, bought from the Main Belting Co. in 1897, will say this belt gave us the best of satisfaction for four years, when it was taken out on account of a change in our power plant. The belt was cut and parts of it used on other work. We considered our original purchase a profitable investment. Signed: BLUE EARTH CITY MILL CO."

SEND FOR "FACTS."

**MAIN BELTING COMPANY**

Philadelphia, Boston  
and Buffalo

55-57 Market St., Chicago, Ill.

## WRITE TO THE Midland Machinery Co.

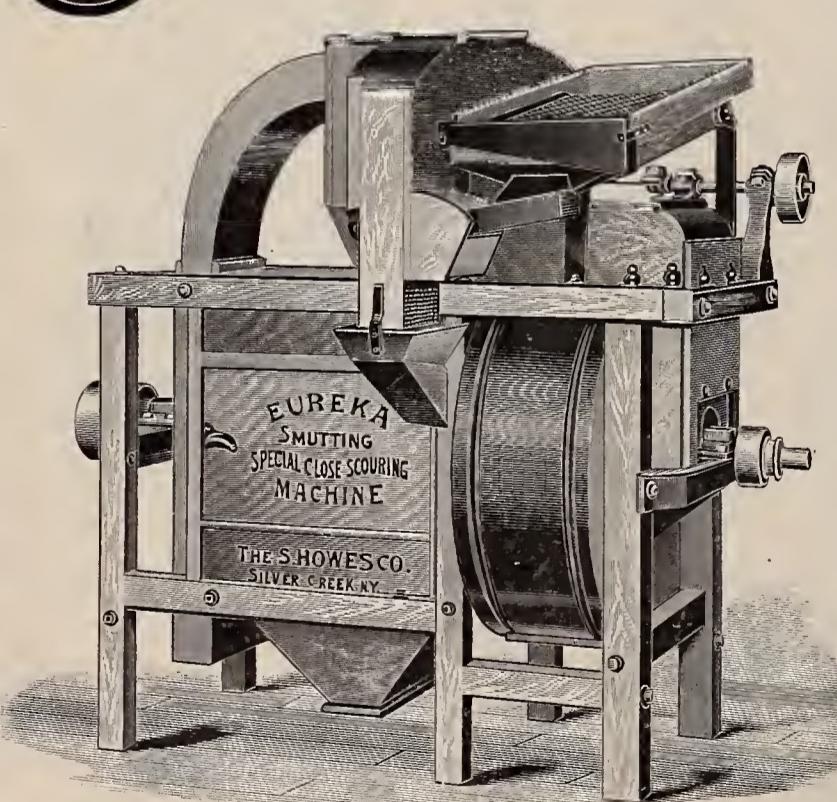
when you want anything in the line of  
**MACHINERY, BELTING, SUPPLIES**

We will fit you out promptly and at right prices.  
Good goods and square treatment. Try us.

412 Third Street, South

Minneapolis, Minn.

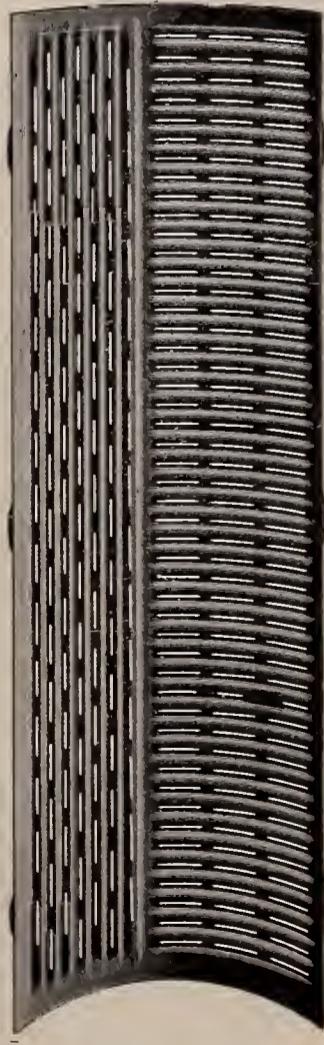
## For Removing Smut From Wheat



no machine will equal

**THE  
EUREKA  
SMUTTER**

equipped with our new  
Scouring Case.



**THE S. HOWES CO., "Eureka Works," Silver Creek, N. Y.**



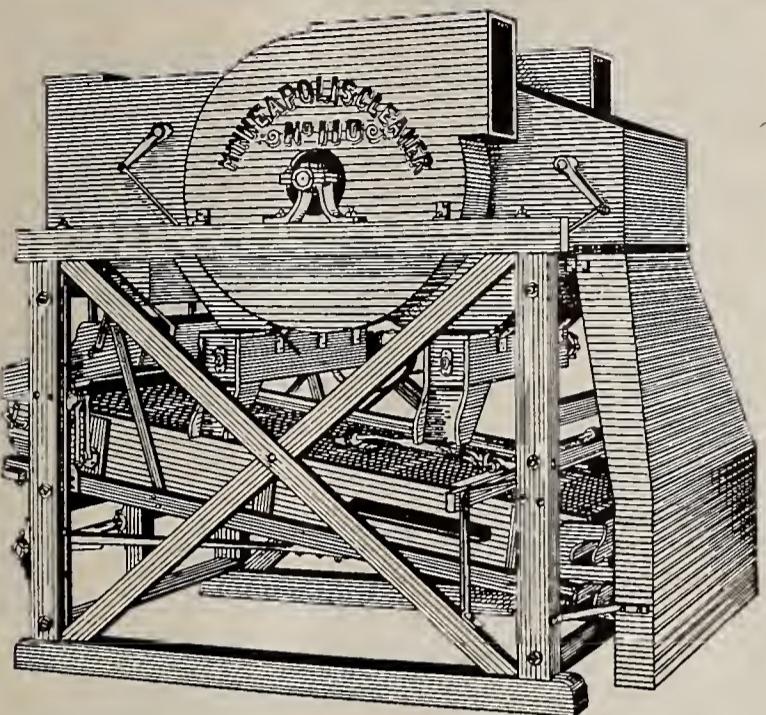
Local Representatives: W. E. Sherer, Minneapolis, Minn.

J. N. Heater, Hotel Savoy, Kansas City, Mo.

# SOMETHING DOING

When Cleaning Either Grain or Flax with an

Owen's Combination Flax and Grain Cleaner



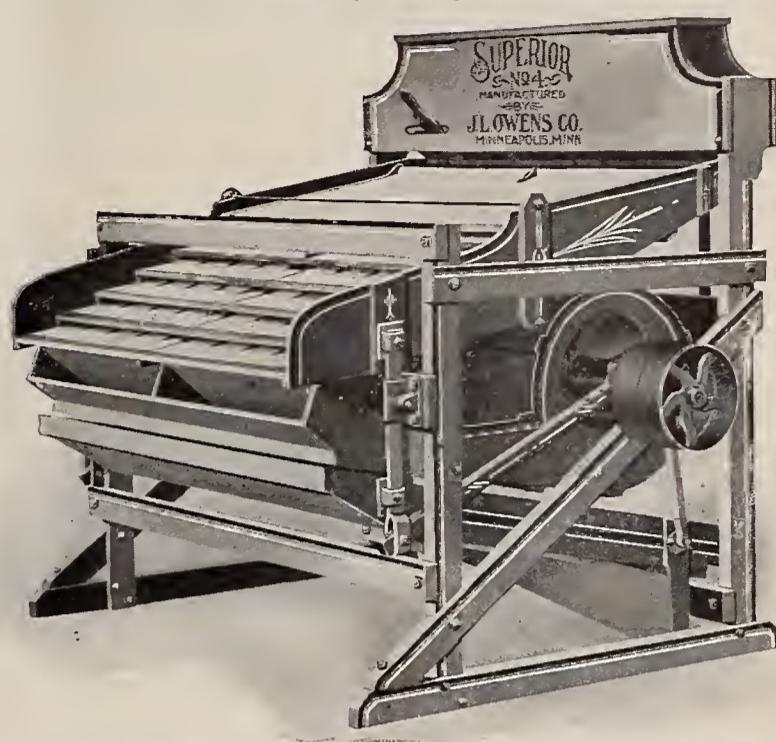
Better made, runs easier and will last longer than any combination machine made.

Write for Complete Catalogue

# SUCCOTASH

Can be Separated with a

**SUPERIOR No. 4**



Positively the **BEST** and **MOST PERFECT** SUCCOTASH SEPARATOR made, and will hold its own for general purposes, cleaning wheat, oats, barley, rye, flax, corn, beans, peas, seeds of all kinds. Requires but one horsepower.

Order one on 30 days' trial.

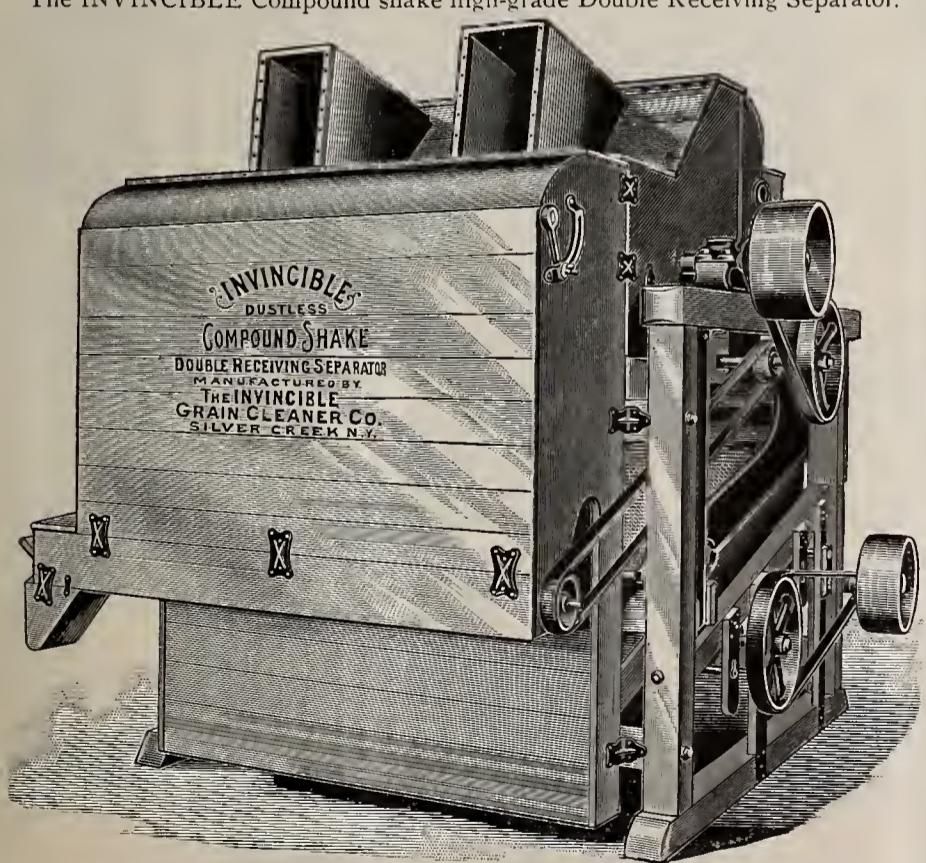
**J. L. OWENS CO.**

615 SUPERIOR ST. S.E.

**MINNEAPOLIS, MINN.**

# GET THE BEST

The INVINCIBLE Compound shake HIGH-GRADE Separators. No shake, no tremble, run perfectly steady. Can be placed anywhere in the elevator. The INVINCIBLE Compound shake high-grade Double Receiving Separator.

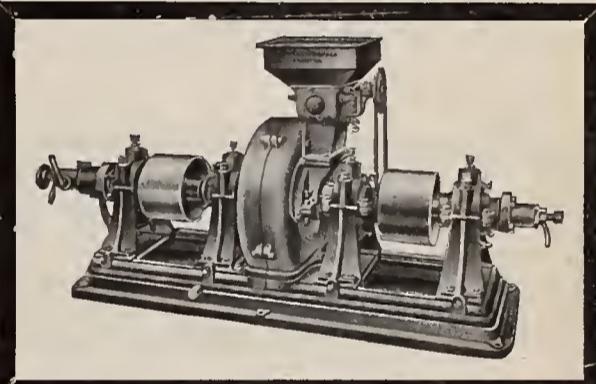


**INVINCIBLE GRAIN CLEANER COMPANY**  
SILVER CREEK, N. Y., U. S. A.

REPRESENTED BY

W. J. Scott, 406 Traders' Bldg., Chicago, Ill.  
Edward A. Ordway, 612 Exchange Bldg., Kansas City, Mo.  
Chas. H. Scott, 307 So. 3d Street, Minneapolis, Minn.  
J. N. Bacon, Blacherne Block, Indianapolis, Ind.  
N. B. Trask, Lochiel Hotel, Harrisburg, Pa.  
Portland Iron Works, Portland, Ore.

**THE  
ONLY  
MILL**



**The Monarch Attrition Mill**

Is the only mill that can be depended upon for continuous work under all circumstances. It is built for hard service. This means that it will grind day after day, making a handsome profit for its owner and pleasing his customers.

### What One User Says

"I like the Monarch Attrition Mill I bought of you in 1898 just as well now as when I got it. I have milled for 34 years, have run all kinds of grinders, but never saw one that will beat this. The farmers all like the grinding and I have some that come a great ways. They like it ground, not mashed. Can grind with less power than with a stone. I grind about 50,000 bushels per year."

"You can refer anyone to me and if they will come here I will show them how to grind corn at the rate of a bushel per minute and do it good."

A. W. GRAVES, Akron, N. Y."

This is only one of hundreds of similar testimonials. Every man who uses a Monarch is satisfied with it. We can refer to users in your own territory, or will send you a mill on trial.

### Write For Our Catalogue

It describes the mill fully and tells why the Monarch has phosphor-bronze interchangeable bearings; cable-chain oilers; double movable base; safety spring; quick release; relief spring; special adjustable three-pulley drive; hammered steel shafting; ball bearings and other exclusive features. A postal card request will bring you a copy.

**SPROUT, WALDRON & CO.**

Northwestern Branch:  
22-28 and 30 Corn Exchange, MINNEAPOLIS, MINN.

Box 320, Muncy, Pa.

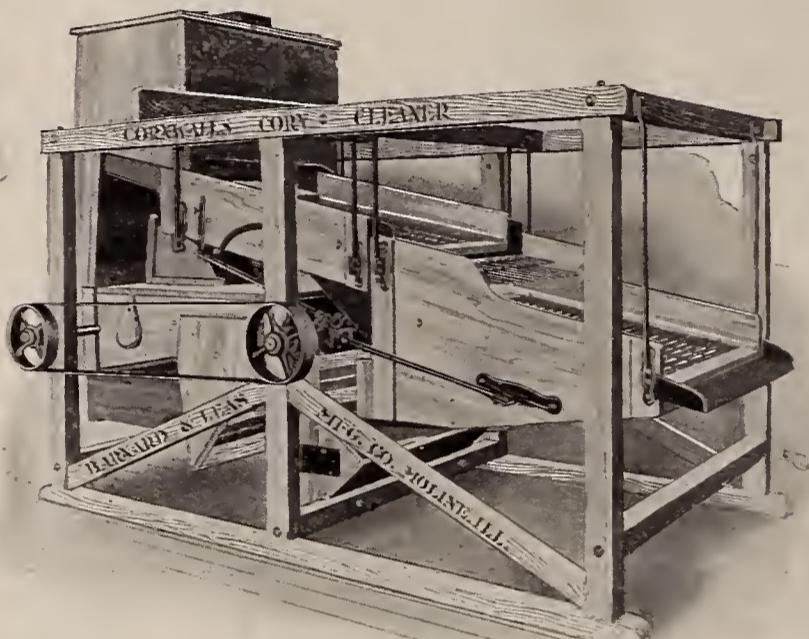
# Barnard & Leas Mfg. Co.

## THE VICTOR CORN SHELLER



The Standard Sheller of the country.  
More of them in use than any other make.  
Has no equal for durability, efficiency and capacity.

Just the machine to handle your large crop.



### The Cornwall Corn Cleaner

The machine best suited to clean your corn after it is shelled.

Its patent finger sieve will not clog, and will remove the small cob ends and pieces of cob always present in corn cleaned by other machines.

We also make other Cleaners and a full line of Shellers, while we furnish everything in the elevator line.

Send for our latest circular.

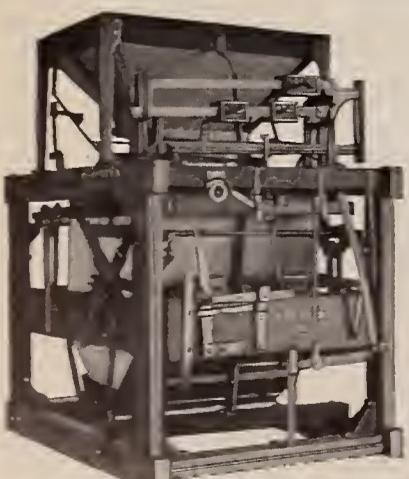
# MOLINE



# ILLINOIS

## SEEDS

THE ALBERT DICKINSON CO.  
.....DEALERS IN.....  
GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS,  
PEAS, POP CORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC.  
CHICAGO, ILL. BRANCH: MINNEAPOLIS, MINN.



HAS NO EQUAL  
The McLeod Automatic  
Grain Scale

Weighs grain accurately while running into cars, bins or sacks.

Weights recorded. Reliable and durable. Prices reasonable. Sold on approval. You cannot buy a better scale at any price. Write for particulars.

McLeod Bros., Marietta, Kan.

### THE ADVANTAGE OF FALL PAINTING

A short practical talk on good paint and good painting for steel work, metal and wood. Write for a copy.

Address PAINT DEPARTMENT,  
JOSEPH DIXON CRUCIBLE CO., Jersey City, N.J.

### The Northway Feed Mill Stands First

In its class—not because we say so, but because hundreds of the most representative millers in the country say so. We know what this feed mill CAN and WILL DO, and if you'll write us we'll send you some important information about it.

And don't forget us when it comes to

### Elevator and Mill Supplies

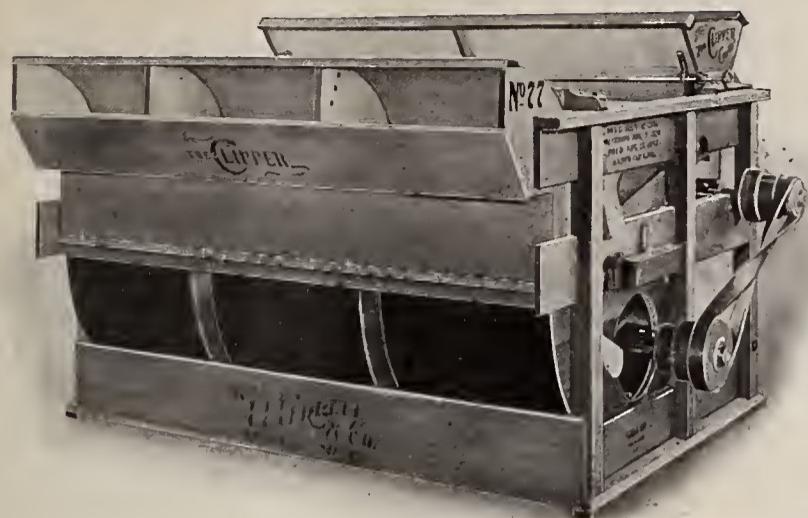
As we carry a complete line of these, and can quote you attractive prices. Roll corrugating done promptly.

STRONG & NORTHWAY MFG. CO.

N. W. Agents Invincible Cleaners and Richmond  
Dust Collectors

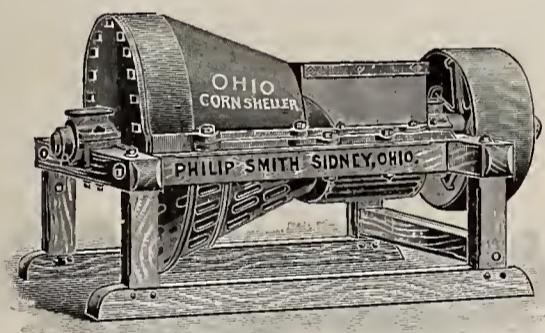
Minneapolis, Minn.

# SAFE INVESTMENTS



This cut is especially adapted to handling wheat, oats, rye and barley and all coarse grain in large quantities, and it will require not to exceed three horsepower. It has triple air drum, insuring uniform air separations. This machine is a winner and cannot fail to give satisfaction. Write for further information and catalog.

**A.T. FERRELL & CO., SAGINAW, W.S., MICH.**



**Corn Shellers**

**Corn Cleaners**

**Drags, Dumps, Etc.**

When you want any machinery or supplies for your elevator, write us for prices :: :: ::

**THE PHILIP SMITH CO.  
SIDNEY, OHIO**

If you are looking for a chance to invest your money where it will bring the largest returns, buy a "CLIPPER" Cleaner. The returns on this investment are in the form of lessened cost of maintenance—both in the amount of power required to operate the machine and the time and attention necessary to keep it in perfect running order. :: The machine shown in

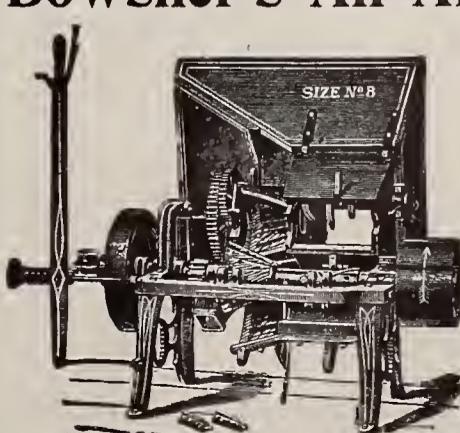
#### PRACTICAL EXPERIENCE

Covering a period of more than thirty years has brought to us perfection in the art of elevator construction and equipment. Be sure you have our estimate on your job before letting your contract. We will save you time and money. Write us your wants.

**GREAT WESTERN MFG. CO.**  
LEAVENWORTH, KANSAS

#### Bowsher's All-Around Feed Mill

(Sold with or without sack elevator)



Drive pulley overhung. Belt to it from any direction.  
Makes complete independent outfit.

It CRUSHES ear corn (with or without shucks) and GRINDS *all kinds* small grain and KAFFIR IN THE HEAD. Has CONICAL shaped GRINDERS, DIFFERENT FROM ALL OTHERS. RUNS LIGHT. Can run EMPTY WITHOUT INJURY. Ahead of rolls or stones in speed and quality of work.

YOU NEED a mill now. QUIT THINKING about it. COMMENCE to investigate. Give US a chance and we'll tell you WHY we think ours is the best.

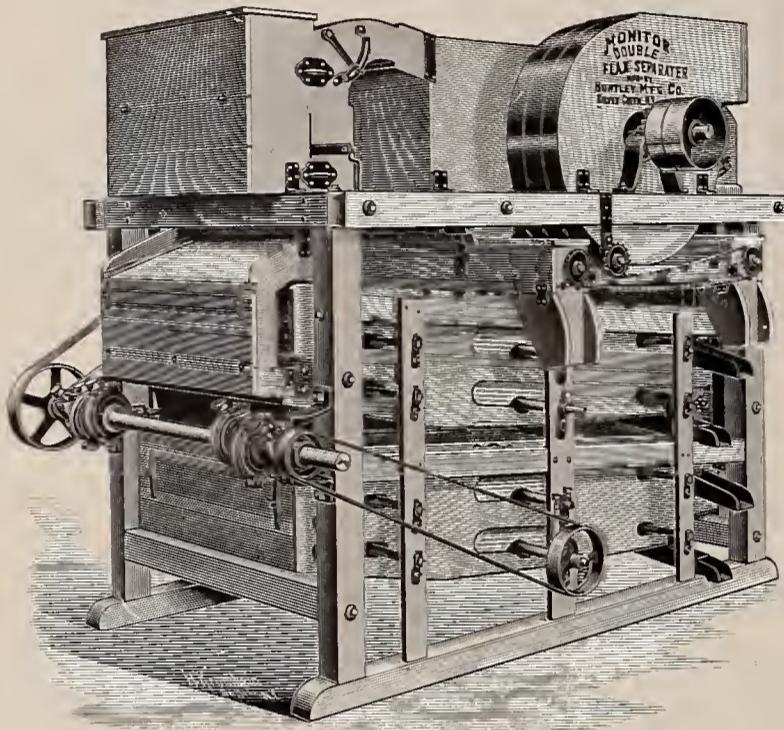
SEVEN SIZES: 2 to 25 H.P.

Circular sent for the asking.

**THE N. P. BOWSHER CO., South Bend, Ind.**

**THE**  
**Monitor Dustless Flax Separator**  
**WILL PAY FOR ITSELF IN A SINGLE SEASON'S USE**

Our "Treatise on Flax," which we shall be pleased to send you, will tell you how in a single season's use you can make the Monitor Dustless Flax Separator pay for itself. It is an interesting story and should be read by everyone who handles any considerable quantity of Flax. Write to-day for this "Treatise of Flax" and put yourself in the way of installing new equipment with small expense.



This cut illustrates

**STYLE "B"**

**MONITOR DUSTLESS  
Double Flax Separator**

This machine is built in five sizes with capacities from 200 to 600 bushels per hour. It is built double, having two complete shakers in one frame and doubling the capacity of a single machine.

The operation of the machine is thoroughly described in our "Treatise on Flax," which you should at once send for.

**LETTERS LIKE THESE COME ONLY FROM SATISFIED USERS**

"We are more than pleased with the machines. The forty sold us last season which were installed in forty of our elevators in North Dakota have given excellent results and more than you claimed for them. The machines sold and guaranteed by you to clean down to 2 per cent on 300 bushels per hour were thoroughly tested, and they cleaned nearly 400 bushels per hour, and the average cars arriving at terminal points tested less than 2 per cent, and several cars being absolutely pure. Our screening seems to be quite free from flax. The machines have done equally well on wheat. We are getting considerable more capacity and better results than from any other make of machine we have ever used, and the machines seem to require very little care or attention.  
ST. ANTHONY & DAKOTA ELEVATOR CO."

"We have been using your Flax Cleaners at the different linseed oil mills we have been running for the past six years, and have not had an idle hour on their account in all that time; neither have we had any expense attached to them in the way of breakage. They are always ready to do their work and the capacity is unlimited."

"We have used reels and various flax cleaners for the past fifteen years, and all of them are failures when compared to yours."

"We wish to compliment you on how well your machine is balanced, as the knock and jar to most cleaners is enough to drive one out of the business."  
DANIELS LINSEED Co."

"We take pleasure in adding our testimonial to the good work of your Special Flax Cleaner No. 8 A."

"The writer is especially interested, having bought the first one from your agent at Minneapolis for the Western Linseed Co., and afterwards purchased four more for the Pioneer Steel Elevator Co. at that place during the fall of 1900."

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"Being thoroughly familiar with the construction and workings of your machine for the past five years, and many others covering a period of twenty years, we feel safe in stating that it is the best Flax Cleaner on the market."

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# THE AMERICAN ELEVATOR AND GRAIN TRADE.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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## ROSENBAUM TERMINAL AT KANSAS CITY.

On the Fourth of July last the first cars of grain were received into the new house of the Terminal Elevator Company then just completed at Kansas City, Kan., by the Macdonald Engineering Co., Chicago. Active construction was begun on this building by the contractors on Sept. 9, 1904; and while progress was somewhat interrupted by wintry weather in January and February, the work was pushed vigorously until completed. The bin story was built from the foundation up in thirty days, commencing on February 15 and finishing on March 15. This is considered good time for this class of construction.

This is the tenth steel fireproof building which the contractors have erected in the last few years, and follows a type which they have originated and made standard in their operations. The storage capacity is 650,000 bushels, divided into sixty-one separate cylindrical steel bins, all with hopper bottoms. The foundation and first story are all of reinforced concrete, supported on piles. In the great flood of June, 1903, the site of this plant was covered with water to a depth of twelve feet; consequently in the erec-



THE J. ROSENBAUM GRAIN COMPANY'S TERMINAL ELEVATOR AT KANSAS CITY, KAN.  
The Macdonald Engineering Company, Chicago, Engineers and Contractors.

tion of the present building, the bin bottoms were kept three feet above the high water line, or fifteen feet above the track grades. The enclosure of the first story, including the supporting columns and bin bottoms, is all of reinforced concrete, and it is said there is not enough wood left in the building to make a lucifer match. The bin story is surmounted by a steel cupola, covered on the outside with galvanized iron. The stairs and passenger elevator are enclosed in a separate exterior tower, reaching from the ground to the bin floor of cupola. The train shed is a two-story steel structure with concrete floors, covered with galvanized iron.

The first story contains the two receiving tracks on which four cars can be spotted simultaneously for unloading. There are two track hoppers for each receiving leg and each track hopper is kept entirely independent of the other, so that the grain doors of one car may be opened and the grain held while the car opposite is being shoveled out. In this way both elevator legs and car shovellers are kept constantly employed and the maximum of efficiency obtained. There are two receiving legs of 15,000 bushels per hour capacity, two shipping legs

of 15,000 bushels per hour capacity and two cleaner legs of 8,000 bushels per hour capacity.

The house is fitted with four Fairbanks Hopper Scales of 1,600 bushels' capacity each, with garners arranged above them of the same capacity. The scales reach about one-half of the bins by direct spouting. The balance of the bins in the storage are filled by means of belt conveyors on the bin floor.

The second story of the train shed contains two Invincible Grain Cleaners of 3,000 bushels' capacity and two Eureka Oat Clippers of 1,500 bushels' capacity. The bins in the front part of the house are subdivided into small compartments and are used exclusively in connection with the cleaning room. A system of Day Dust Collectors is connected with the different cleaning machines and dust is conveyed pneumatically to the furnace under the boilers.

The shipping track is on the outside of the train shed and covered with an awning roof.

The power plant is entirely of brick and concrete, with a brick stack 170 feet high and five feet in diameter. The power is furnished by an Allis-Chalmers Company Tandem Corliss Compound Engine of 500 horsepower. Steam is supplied by a battery of return tubular boilers of 150 horsepower.

Between the engine room and the boiler house a drier building has been erected that is 65 feet high and contains one of the largest steel driers in the West. This drier is built after the Ellis patents and contains 15,000 square feet of exposed grain surface to the action of the hot air coming from the heaters by means of forced draught. This machine has a capacity of drying and cooling 2,000 bushels of grain per hour, removing 7 per cent of moisture.

A. K. Adler of Chicago was the owners' supervising architect during the construction.

The machinery equipment was furnished by the Webster Manufacturing Co. of Chicago.

The plant has been in active operation day and night since it was put in service by the owners, the Terminal Elevator Company of Kansas City, which conducts the western business of the J. Rosenbaum Grain Company, and has already handled a large portion of the grain arriving at the C., R. I. & P. terminals.

#### SHRINKAGE OF WHEAT.

Shrinkage in the weight of grain is, of course, largely a matter of moisture and treatment. If grain is stored where conditions are favorable for the loss of moisture, it will shrink in weight in proportion to its original moisture contents. But usually the loss is neutralized by atmospheric conditions which retard evaporation from the grain and may even add weight to it by saturating it with atmospheric moisture, should the grain be in condition to absorb dampness. The shrinkage question is, therefore, more or less of a puzzle each season.

The experiment stations have, therefore, devoted much time to the study of shrinkage, and in general terms have found that overripe wheat weighs slightly less than grain harvested when just ripe. After thrashing the loss by shrinkage varies—from 2 to 5 per cent, according to the Michigan station's reports.

Experiments made at the New York station two or three years ago showed a large loss of moisture on wheat stored in small quantities in net bags suspended from the laboratory ceiling. At thrashing, the moisture contents were estimated at 27.02 per cent (July 18), which by November 22 had declined to but 2.96 per cent; while samples taken from the interior of a mass of several hundred bushels showed a loss of about 5 per cent of the original moisture contents. The loss is rapid at first, slow afterward, as might be guessed.

In very dry climates, on the other hand, wheat seems to gain in weight while in winter storage, and especially so when shipped to a moist climate. In such climates, as in California and Utah, wheat cured in the field before storing is probably as

nearly absolutely dry as it would be under any circumstances, and, of course, is in a condition to absorb moisture whenever opportunity offered.

Oats as a rule shrink very little after passing through the sweating process.

#### ALBERT TODD.

Five years ago Albert Todd of Owosso, Mich., said to his bookkeeper, "Let's see if we can't get four or five hay dealers together and form a little organization." A number of letters were thereupon sent out to dealers in that and adjoining counties, and fifty shippers responded, meeting in Mr. Todd's office in July. The benefits of an association of interests were talked over, entertainment was provided and the meeting proved a big success. They adjourned for one month and then met at Owosso and organized what is now the Michigan Hay Association. At that meeting for organization sixty-five were present. At the close of the Jackson meeting, August 3 and 4 of the present year, the actual paid-up membership was 150, and this after



ALBERT TODD, OWOSO, MICH.

one of the worst years for the hay business the Michigan shipper has experienced for many years. The Association is strong and of value to the members far greater than to be measured in dollars and cents.

As the organization of this Association had its inception in the mind and is largely the result of the energies of Mr. Todd, he is familiarly known from one end of Michigan to the other as "Daddy" Todd. "Daddy" Todd has spent the last fifteen years in the grain business at Owosso, during the last ten of which he has handled hay as well as grain and beans, shipping on an average 1,200 cars of hay each year in addition to his other business.

Mr. Todd was born at Flint, Mich., sixty-three years ago, and hence is one of the pioneers of Michigan, his parents being "Aunt Polly" and "Uncle John" Todd, who are kindly remembered by the older residents of the state. He was the youngest of the family. His oldest sister was one of the first white children born in Genesee County. When a young man he was station agent on the old "Ram's Horn" Railroad, and later became a conductor on the F. & P. M. He moved to Owosso in 1869 and engaged in the lumber business, in which he continued actively until he entered the grain business. He still has, however, some timber interests in the South. Mr. Todd operates from Bennington, Denison, Owosso, Kerby and Corunna, Mich., having grain elevators at some of the places named and hay warehouses at all of them. He ships hay from all parts of the state.

June 14, 1873, Mr. Todd married Mary Gould of Owosso, the eldest daughter of Col. E. Gould, who

commanded the Fifth Michigan Cavalry during the Civil War. There are two children, a son and a daughter, the son being Leroy W. Todd, who conducts a hay commission business in Water Street, Boston, Mass. Although he is sixty-three years old, Mr. Todd would easily pass for a much younger man, as his genial, pleasant manner and sprightly ways have preserved in him a vigor which well could be the pride of many men twenty years younger.

#### [For the "American Elevator and Grain Trade."] PRACTICAL INSPECTION FROM A SHIPPER'S STANDPOINT.

BY H. W. KRESS.

As a country grain shipper I have always had a desire to make a study of the different things that affect the shipper at the terminal market. Having disposed of my interests in the Kress Grain Co. of Middletown, Ohio, I came to Toledo to take up the study of inspection. And this has enabled me to observe the things in every form that go to affect the country shipper. Having taken an active part in association work, I have had plenty of opportunity to hear complaints of every kind hurled at the different terminal markets. Since being here I have drawn my own conclusions as to their correctness.

I am sorry to say that there are quite a few country shippers who think themselves infallible in their method of doing business. A great deal of bad feeling could be avoided if the shipper would make an effort to look into matters at his own station. I can look back and see many mistakes I made when a shipper and remember how I felt like condemning everybody who had anything to do with the handling of my grain at its destination. I see now where the shipper makes errors. He is too anxious to condemn the fellow at the other end without giving him a chance to meet his complaints half way. I have been here since the 15th of July, and have been given every chance and opportunity to see for myself. The Clover Leaf, Wabash No. 5, East Side Iron and C. H. & D. elevators are all run on practically the same basis, with a few exceptions. I shall now ask you to follow me as I make my rounds from day to day.

On arriving at Wabash No. 5 at 6 o'clock a. m., I meet Mr. Dan Blankenmyer, inspector at this yard. The cars that contain grain having been marked by the yard clerk, the inspector's helper proceeds through the yard and opens the cars, the inspector following with his tryer and scale tester. He notes the condition of the car, as regards any defects or leaks, but only on one side of the car, having no orders to examine the other side. This is what you might call a half-way method of examining cars, and no doubt misleads the shipper as regards many of his shortages. For example, we will say the shipper sends in a car of grain, and the inspector finds the car, as far as he has examined it, in good condition, and a report goes back to the shipper with condition of car marked O. K. This car, however, had a leak which the inspector did not catch, owing to his seeing but one side of the car. When the shipper gets his return of weight he naturally has a shortage which he is unable to account for, his certificate showing the car O. K., which leads him to draw the conclusion, if he is inclined to be the least skeptical, that "they are doing him" at the other end. If this method of examination could be corrected, the receiver as well as the shipper would be relieved of a great deal of unnecessary correspondence.

Now let me continue with the inspector as he enters the car. He takes his tryer and plunges it to the bottom of the car until he has obtained an average sample of what the car contains. Then he takes his test scale and weighs the drawn sample, which gives him the average weight of the car. After that he carefully examines the said sample and makes his inspection of the same. A ticket to this effect is put on the grain door, and a record also is kept by him in a book. The car

is resealed with the Produce Exchange seal and is ready to be unloaded at elevator. If the car, after arriving at the elevator, is found to have been plugged, it is subject to reinspection.

If a shipper will take his bad grain and put it on the top instead of at the ends or the bottom of car, his chances for leniency are far better, as I have noticed. Since I have been here there has been hardly a day but someone will have found a shipper trying these practices.

If the shipper would refuse to load cars that are not fit for grain, it would be the starting point for better equipment. I say, let him start his investigation at his own station, and if he is perfectly satisfied that he is right, but still has complaints to offer, it will pay him to jump on the first train and follow his grain to its destination and see for himself where his complaints are justified. He would find in lots of cases that the trouble is that his cars have been hammered and pounded around in transit until they have sprung a leak. I am seeing cars every day that the shipper has carefully examined and coopered, but which on arriving at the market are found to be so out of condition that the inspector is forced to mark them as he sees them, and is unable to tell whether such cars sprang a leak in transit, or whether the shipper knowingly loaded the same.

And right here is, to my mind, one of our greatest troubles, the fact that the railroads are to blame for the kind of equipment that is furnished the shipper. Until we get together and force the railroads to give us some consideration in this respect, there will continue to be complaints galore.

I will gladly answer any questions or look into any matters requested of me by the shipper. The reader may write to me direct by addressing me at Toledo, or through the columns of the "American Elevator and Grain Trade." In the future issues I will continue this subject by taking up each branch separately until I shall have covered the whole field.

#### IRREGULAR IGNITION.

An essential point in obtaining a strong spark is that a good contact shall be made before the contact points are forced apart.

In practically all make-and-break igniters the movable electrode passes through an iron or a bronze bushing and the current must pass from this bushing to the axis of this electrode before reaching the contact points.

Under certain conditions the contact between the outer stem and its bearing, i. e., with the metal of the engine, may be so poor that only a small current could flow; so that on breaking the contact the spark is too feeble to light the gas.

Oftentimes when this condition exists it can be seen by shielding the igniter mechanism from the light. If the contact between the igniter stem and bearing is poor, small sparks may often be noticed around the igniter parts outside of the cylinder.

The cause of this trouble may be due to the presence of too much oil on the igniter bearing; it is, however, more often due to wear and a poor fit between the stem and its bearings; for where the bearing is poor the gas and burnt oil flow through, and by reason of the high temperature which the stem reaches after a few minutes running, the oil and soot bake on it, forming with the "fire rust" a coating that is an extremely poor conductor.

Add to the resistance thus offered—that due to the accumulation of fresh or of burnt oil on the contact points proper, inside the cylinder an amount of resistance is easily reached which prevents the passage of enough current to give a satisfactory spark.

When the stem is flooded with oil a good contact is not formed for the current, as oil is a poor conductor, and when it completely surrounds the stem the insulation is absolute. Yet when well oiled the igniter works better than when the bearing is dry.

The prevention of the loss of this oil and the

keeping of the bearing in good condition could be obtained by making a valve shoulder near the outside end of the bearing or by surrounding the outer end with a stuffing box, and lastly a perfect metallic contact should be had, either by soldering a flexible wire direct to the igniter stem, or to a copper brush pressed against the stem at its extreme outside end. Where such provision is properly made it will be found that an ample spark for all purposes can be furnished with from one-third to one-half the battery power usually found to be necessary.—Gas Power.

#### BALTIMORE TO HAVE A DRIER.

Ever since the special committee of the Baltimore Chamber of Commerce, consisting of Geo. S. Jackson, John W. Snyder and Robert Ramsay, visited the grain driers at New Orleans and saw what they are doing for export grain at that port

#### TWO ELEVATORS OF THE H. L. STRONG GRAIN COMPANY.

We are able to present herewith pictures of two very well appointed elevators, designed for the cleaning and transfer work of the system of line elevators operated in Kansas by the H. L. Strong Grain Company of Kansas City, Mo.

One of these houses is that located at that important gateway from Kansas into the South and Southwest, Coffeyville. The elevator was built expressly for transferring, cleaning, shelling, sacking and the mixing of grain in transit, and, therefore, for handling the orders for straight or mixed car-loads of grain and feedstuffs that are called for by the Southern order trade. Coffeyville is exceptionally well located for the business, as grain can be handled in transit here from all points in Kansas on the Mo. Pac. and many points on the A. T. & S. Fe and M. K. & T. railroads to points South



TRANSFER AND CLEANING ELEVATOR OF H. L. STRONG GRAIN COMPANY AT COFFEYVILLE, KAN

and made their report, the Baltimore exporters have spared no effort to have the facilities of Baltimore extended to include such apparatus.

It is now announced that the Baltimore & Ohio Railroad will erect a drier near its elevators at Locust Point, having placed an order with the Hess Warming & Ventilating Company of Chicago for a No. 10 Hess Drier and Cooler. The machine will have a capacity of about 50,000 bushels daily.

It is added that the Northern Central Railway also will probably build a drier at its elevators at Canton. The building of one or more driers will, of course, place Baltimore on an equal footing with the other ex-ports handling corn and prevent any possible retrograding to an inferior position as a grain port through lack of handling facilities. A lesser, but equally profitable, advantage of the driers will be the saving of money to shippers of off-grade grain.

The Northwestern Grain Dealers' Association has had in operation for a year a mutual system for purchasing gasoline for members' use. It has worked to the satisfaction of all and has materially reduced the cost of that fuel to members.

A fraud order, stopping delivery of mail, was issued on August 28 against Purtelle, Price & Co., 54 Commerce Building, Chicago, the inspector having reported that Purtelle is all there is of the firm, and that the scheme is one to defraud by representing that the "company" furnishes inside tips on movements in the grain market.

in Indian Territory, Texas, Arkansas, Louisiana, Tennessee, etc.

The elevator was not intended to serve as a storage house, but it will hold from 25,000 to 40,000 bushels, according to the kind of grain and manner stored. The main building is a frame structure, well built by experienced millwrights, and is covered with corrugated iron. It contains two large Howe Standard Ball-bearing Hopper Scales of 75,000 pounds' capacity, of the latest pattern, with registering beam, making errors of recording weights impossible; two power scoops for unloading two cars at a time; three elevating legs, with buckets of one leg 4x14 inches and of the other two 5x16 inches, running to top of cupola, about 70 feet, where the grain is distributed to the scales and bins; two flexible loading spouts, so that two cars can be loaded at a time if necessary, the discharge being direct from scales to cars; large sheller for shelling corn from cars in transit, with capacity of 1,000 bushels per hour; Cornwall Patent Corn Cleaner, with non-choke cob separator; Invincible No. 9 Scouring and Cleaning Machine, for wheat and oats, with capacity from 1,000 bushels to 1,500 bushels per hour; wagon dumps for receiving local grain and wagon scale in dump.

The power is a 75-horsepower steam engine, using natural gas for fuel, which is extremely cheap. The elevator contains also an attrition feed mill for making feed, for which this elevator secures a large local trade.

Coffeyville is now a city of 15,000 people. It

is a very important railway center, and is building up very rapidly with factories. The territory tributary to Coffeyville raises corn, oats and wheat, but the most important grain raised in this immediate territory is the red rust-proof variety of oats, in great demand every year in Arkansas, Tennessee, Louisiana, Mississippi, Georgia and other Southern states for seeding purposes, and bringing a premium over the ordinary feed oats. Cane seed and Kaffir corn is also raised quite extensively.

The elevator, which cost \$13,500 to build and equip, is located near the Missouri Pacific and convenient to the telegraph station, as well as having frequent mail deliveries.

The other house, located at Conway Springs, is also situated on the Missouri Pacific, at the junction of the Kiowa and Larned branches and the Wichita and Coffeyville divisions of the same road.

This building is frame, iron-clad, and especially adapted for transferring and cleaning in transit. It has large switch capacity, with tracks giving ample room for all cars necessary. It has power unloading scoop, large scouring and cleaning machine (600 bushels per hour capacity), large carlot hopper scales of the latest Monarch Recording-

[For the "American Elevator and Grain Trade."]  
**THE CO-OPERATIVE MOVEMENT.**

BY A TRAVELER.

The movement for starting farmers' elevators is still strong in many locations, in spite of the very widespread experience of failure that these companies have had in the past. It seems that experience does not count, or that in every fresh agitation of this question it is thought by the promoters that their conditions are different from those at other points, or that they are free from the failings of human nature which have been exhibited by their neighbors. So another company is organized which can quite certainly be counted to be a losing financial proposition to the stockholders who have so much faith in it as a panacea for all the imaginary and real wrongs which they lay at the door of the regular grain dealer.

In consulting with many persons on this subject as my business takes me into new localities in the West, I find that the first efforts of promoters are directed to getting a good but cheap man to operate the business. They have little trouble in fulfilling one of these conditions—which, it is easy

for he has even more to contend with than the average grain buyer, because every farmer who is interested in the company wants something to say in the management and desires favors. Dissatisfaction, accusation of favoritism, soon follow. Then a change of managers; and so on, over again.

It has failed to be recorded, I think, that there has ever been a case where a farmers' company has fulfilled permanently its promise to pay more for grain than the regular dealer. The rule is that the farmers' companies are compelled to pay a cent less, expecting to make this up in dividends on stock. But why are dividends so uncertain in forthcoming? Because their market is narrower, bids are fewer than are received by the individual buyers; the manager's experience and his knowledge of the business are not sufficient to enable him to take advantage of market conditions or advantageous locations for shipments at certain seasons. Then, too, there is lack of boldness and want of that soundness in judgment which one not personally interested in the business will never have. Furthermore, the cheap man does not know how to handle grain that may be out of condition, or, if he does know this, he cannot dictate to his many bosses. He knows little or nothing of freight rates and railroad conditions with reference to grain shipments, which may in themselves mean the difference between a profit and a loss.

Then, again, by not paying a sufficient salary for the work expected and performed, the way is left open to the tempter, and there is a case of boodle or graft, as not infrequently has occurred in farmers' organizations.

These are some of the points which, I find, mark in practice the difference between a bright and shining theory and the reality. The personal element should be taken in account in getting at practical results in all lines of business; but this is seldom done by co-operative theorists.

In any business venture some one individual must be responsible for results, and be sufficiently interested to work for results. In the case of the co-operative there is really no one, beyond the desire to hold on to a \$400 to \$500 job.

A glance at the map of any grain-growing state will show any reasonable man that the railroad stations are so near together (and many stations have from two to eight elevators) that any one buyer cannot get very far out of line on price or fail in fair treatment without his neighbors getting his business; and experienced men know that agreements among dealers are as often agreements to put prices high enough to make only a fair margin, and so keep out competition as they are to keep prices down.

Let the farmer stick to his specialty. There is plenty for him to learn. Let him study new and advanced methods of culture of the soil, improvement of seeds, proper rotation and new crops which are particularly adapted to his location, as well as many other subjects suggested to him by his state and the national agricultural departments. Or, if the farmers must try a co-operation, first of all let them select a first-class, experienced man, whom they can trust, pay him a good salary, and put him in full charge of the management of the business, and see that he does business on business principles and not as a pirate or free lance.

**PROFIT IN CLEANING.**

A grain separator agent in Minnesota recently tested the money value of succotash separators, which is reported as follows:

Taking a quantity, 500 bushels of succotash, wheat and oats grown together, containing a proportion of about one-third wheat and two-thirds oats, he found the total weight to be about 24,000 pounds. These sold to the elevators in the usual method as oats would bring, at June prices, 28 cents per bushel for 750 bushels, a total of \$210.

When separated this same quantity of succotash yields 133½ bushels of wheat, which at the then market price of 90 cents would sell at \$120, and 500 bushels of oats at 28 cents per bushel, bringing



TRANSFER AND CLEANING ELEVATOR OF H. L. STRONG GRAIN COMPANY, AT CONWAY SPRINGS, KAN.

beam pattern, making error of record of weights impossible. There are also three elevating legs, with buckets 6x12 inches and 6x14 inches, running to top of cupola, about 70 feet.

The power is a first-class steam engine of 75 horsepower, with 80-horsepower steel boiler, giving ample power for any and all work required. There is also a feed mill for making feed, wagon dumps for local grain, and large coal bins for retail coal trade, which is quite extensive.

The elevator, which cost \$6,500, is not built for storage house, but will take care of 20,000 to 25,000 bushels of wheat if necessary. Wheat is the principal grain raised in this territory, Conway Springs being located in Sumner County, one of the best wheat counties of the state of Kansas. Some corn and oats also are raised.

With these two houses as interior assembling points the H. L. Strong Grain Co. is in quite an enviable position to handle the order trade, which forms so large a part of their business.

The elevator taxes for 1903 on grain in store in Duluth were paid in August last, amounting, by settlement agreement, to \$2,394.30.

In eastern Washington the wheat growers raided the railroad construction camps and impressed their men to work in the harvest fields, causing a practical stoppage of railway building for the time being. The farmers paid \$2 to \$2.50 per day and board, while the railroads paid but \$1.75 per day less \$4 per week for board.

to guess. The cheap man, of course, is put in charge, in order to save on expense directly. And having had very little or no experience in the grain business (experience that it takes some of our shrewdest grain men years to acquire in form to apply to their business with a resulting profit at the end of the year), this cheap manager is supposed to pay even more for grain than the individual or private buyer can pay, and also earn a dividend on the stock.

The company starts in to handle grain only; but the greed and enthusiasm is so great before a settling day comes that the directors soon enlarge its scope to include general merchandise, agricultural implements, harness, hardware, groceries, lumber, coal; in fact, they make of it often considerable of a department store. The same one man, however, must conduct the entire business, including all of these lines of merchandise, and keep all on a paying basis. Can it be expected, or is it rational to presume, that it can be done?

Few thoroughly competent grain men would undertake so much. It is rare that one finds a regular grain dealer spreading his business to such an extent. As a result of this expansion of trade, the regular merchants of the town feel the loss of business, and they soon must hunt for locations where they can do business. Stores become vacant; properties run down in condition and shrink in value, and the town as a whole is making backward leaps.

But the manager is getting his experience fast;

\$140, a total of \$260 for the separated grain, showing a gain of \$50 received, over that received for the grain before separation.

Deducting from this \$50 profit the expense of separating at the cost price for time consumed in the work, \$10 and \$25, the cost of one of the machines, there is still remaining a net profit of \$15 on every 500 bushels of succotash separated.

### OHIO CROP REPORTING.

The Ohio state machinery for reporting crop prospects has been often attacked, and by none more vigorously than by a former president of the State Board of Agriculture, who is also a prominent grain dealer, who has on many public occasions expressed his want of confidence in the men and their reports. Other grain men who have made a study of the State Board's reporters and system do not agree with the critic to whom we refer; and, therefore, a defense of the Board's reporters as a whole by one of the number may not be without interest to our readers in Ohio:

"I have been a state crop reporter for twenty-five years," writes L. B. Pierce of Summit County to the Country Gentleman of August 10, "and have had many arguments with farmers as to the manner of estimating, and have been much surprised at the ignorance of many as to the terms of statement, as well as basis of estimates. A good many have no definite idea of what an average crop is; and as the basis is an average, it leaves them all at sea. Each reporter in Ohio has to do with one township, and it is only by careful watching of crop yields for, say, ten years, that any just basis from which to make percentages can be obtained. When I began I was almost entirely ignorant of crop statistics, and possibly there were few of the 1,400 reporters selected at the same time in Ohio who were any less so. On some points of vital importance, the secretary of agriculture seemed unable to advise, and on others he seemed wrong; so I have no doubt that there was considerable guesswork for several years. The matter of an average crop bothered me at first. The average for wheat for the whole state was less than nine bushels per acre; and some quite intelligent reporters insisted that this should be the basis for percentages on that crop, regardless of whether the reporter lived on the poor hills of Athens County or the fertile wheat lands of Stark. In one case the yield was generally below the nine bushels, while in some townships of the wheat counties it was twice or thrice that.

"In my own township of gently undulating and fertile soil, it was rare to find fields going below nine bushels, and I found by getting nearly exact thrashing statistics from half the township that the average yield for five years was about fourteen bushels. I made this a basis for ten years, when I found that the average had come up at least four bushels per acre. This could be easily accounted for. The introduction of a number of silos made more manure; animal manure was more carefully conserved and applied more intelligently; the use of commercial fertilizers became general; and more than all, the acreage was reduced to fields which were fitted to the production of a paying crop.

"From sowing time until harvest the monthly reports deal with appearance merely, and only after thrashing are actual yields reported. I find that many farmers are unable to understand that a crop can be more than 100 per cent of an average. They say that 100 per cent is the whole—how can there be more?—forgetting that the percentage applies to an average of all crops in a township, and that some can easily fall below or rise above the average.

"There are many elements of discord as well as uncertainty in crop reporting. Crops like potatoes, which everybody grows and which cover a period of early and late, are much more difficult to estimate than rye or barley, which are only grown here and there. In one case both acreage and yield cannot be got at without a farm-to-farm can-

vass, while in the other both may be had with very little trouble.

"However, with all the drawbacks, I have come to the conclusion that a trained corps of reporters, like those in Ohio, come very near the facts. In my county there must be twenty or more; yet I often find myself only two or three points from the average. Of the United States reports, I cannot speak so confidently, although it may be that things are managed better now than formerly. Forty years ago, my uncle reported for pretty much all northern Ohio, and up to a quite recent period the reporters were greatly scattered, and many were wholly unqualified either to guess or to digest facts."

### R. E. YORK.

The Wisconsin Grain Dealers' Association may or may not have consciously adopted the policy of training its officers by preliminary service on the governing board; but in the case of R. E. York, president, it has practiced it and with good results. When the Association was organized Mr. York was



R. E. YORK, PORTAGE, WIS.

made a member of the first board of governors, and kept there two years; then (1904) he was elected president and was re-elected in July of this year for another year. The success of the Association is the best evidence that the practice referred to has its strong points.

Mr. York has been in the grain business as a buyer and shipper for the past twenty-five years. He is also a consumer of grain, being a member of the milling firm of I. W. York & Co., who own and operate a large flouring mill and elevator at Portage and also a feed mill and elevator in the famous dairy country of Wisconsin at Kilbourne City.

Canadian farmers are buying the early maturing Kansas hard wheat for seed.

There is a threatened sack famine on the Pacific Coast, and as nearly all grain grown on the Coast is handled in bags a shortage might prove an inconvenient matter. The last quotation was 8½ cents at Davenport, Wash., but none were sold then (August 17) with a guarantee of delivery.

The best reported yield of oats this season in Central Illinois for the number of acres is that of Robert Ashby of Ford County. He had 320 acres which averaged 58½ bushels per acre, 100 acres making 68½ bushels per acre, 100 acres 61 bushels per acre, and 20 acres that he took especial pains to grade his seed for made a fraction over 76 bushels per acre, clearly showing that it pays to grade seed oats. Mr. Ashby says he culled almost two-thirds of this seed with a modern seed mill, using only one-third for seed and using the balance for feed.

### [For the "American Elevator and Grain Trade."] COST OF OPERATING A COUNTRY ELEVATOR.

BY G. A. STIBBENS.

In estimating the cost of operating a country elevator, I will take as a basis to figure on an elevator of 10,000 bushels' capacity, equipped with a gasoline engine of 15 horsepower, corn sheller and cleaner, and doing a yearly business of 100,000 bushels, which is a fair average in the grain producing states. Such an elevator as I have described has a market value of \$5,000 in any good grain section. The actual expense of operating and maintaining the above plant is as follows:

\$3,000 insurance one year.....	\$ 32.25
\$1,000 insurance on stock.....	20.00
Repairs one year .....	50.00
500 gallons gasoline .....	70.00
One hired man at \$40 per month.....	480.00
Six per cent interest on investment.....	300.00
Shrinkage in handling and in transit, one-half of 1 per cent, or 500 bu. at 30c.....	150.00
	\$1,102.25

We ascertain from the above figures that the actual cost of handling grain is 1.001 cents per bushel; but it must be borne in mind that it takes two men to conduct a grain business, but I have made no allowance for the owner's time, neither have I deducted anything for off grades, which amount to considerable during a year.

The average country dealer cannot secure more than two cents per bushel gross profit; therefore, the owner of a plant handling 100,000 bushels would receive the magnificent sum of \$898 after deducting expenses to compensate him for his time.

### NEW FIREPROOF ELEVATOR AT BUFFALO.

The Steel Storage and Elevator Construction Company of Buffalo, N. Y., has been awarded the contract for the erection of a fireproof steel grain elevator to be built on the site of the old Ontario Elevator at Buffalo by A. J. Wheeler. This new elevator will have a storage capacity of over half a million bushels and will be modern in every detail. The fireproof feature has received special attention. The lower story will be built of concrete reinforced with steel bars throughout and supported on over 1,000 piles driven to rock. The bins, which are 46 in number, will be built throughout of steel. The marine tower and cupola will be built of structural steel throughout with concrete floors. All elevator legs and garners will be of steel frame construction. The marine tower will be equipped with the largest marine leg in the city and will further have a complete equipment of power grain shovels and all modern devices for the rapid unloading of lake vessels. The house will be equipped to receive grain either from lake vessels or from cars. Special attention has been paid to equipping the house in such a way that it will be able to do a rapid car business, and it will also be provided with a number of wagon bins, to care for local trade. All machinery in the house will be driven by electric motors, using Niagara Falls power. The motors, nine in number, will be controlled from a switch room, located on the lower floor of the elevator. The house will be equipped with complete set of grain cleaning machinery and will have an independent system of electric lighting and telephones. The work on the new house will be begun at once and will be rushed to early completion, so as to be ready for business as soon as possible and avoid further loss to the owner on account of the wooden elevator, which formerly occupied this site, being destroyed by an explosion last fall. When all the work is complete it will represent an expenditure of \$200,000. The same company has the contract of the Geo. Urban Milling Company of Buffalo for the erection of a steel grain storage annex with a stor-

age capacity of 116,000 bushels, divided into eight bins. The new storage plant is to be connected to the old one by a steel gallery with belt conveyor.

#### THE JEFFREY FINGER-TRAY ELEVATOR.

In many flour mills and cereal food plants a handy package elevator of the type illustrated herewith would prove a valuable addition to the equipment. As a means of carrying small sacks and



JEFFREY FINGER TRAY ELEVATOR.

cartons from one floor to another it is especially useful.

This device is the Jeffrey Finger-Tray Elevator, the accompanying illustrations showing the lower end of one installed in the wholesale grocery store of Hulman & Co., at Terre Haute, Ind., by the Jeffrey Mfg. Co. of Columbus, Ohio.

This elevator is about 90 feet centers and is used for the elevating and lowering of miscellaneous packages, boxes, bags, etc., the variety of which is shown by the illustrations.

It is constructed of two strands of special steel chain, operating over sprocket wheels at top and bottom. These chains are provided with studs or pivots which carry special trays constructed of



JEFFREY FINGER-TRAY ELEVATOR.

hangers, cross bars and fingers, the platform or tray proper being made with a series of cross bars or fingers, the purpose of which is explained further along. These trays swing perfectly free on the pivots, but are provided with rollers at each end, these rollers traveling in vertical guides to keep the trays steady and prevent the load from falling off.

Should the load not be discharged at any of the points, no harm will be done, because the trays will simply pass over the head wheels, come down on the other side and up again the same as before, and will continue to do this indefinitely until the load is removed. To discharge the load, special inclined unloading fingers are provided. These fingers are so located as to register exactly with the fingers in the tray. The traveling fingers, passing down between the discharge fingers, leave the

load on the latter, and the load, owing to the angle of the fingers, slides off onto a steel apron conveyor, which carries it some distance away and deposits it on the floor. This apron conveyor, however, is not required in all cases.

The operation in loading the trays is somewhat similar, except that the loading fingers are straight and the load is removed from them by the trays passing up between on the ascending side, the unloading being done on the descending side. Both the loading and unloading fingers are pivoted and can be folded back out of the way, allowing the load to pass up and down when desired without being discharged.

This elevator has trays 26 inches by 36 inches and will carry weights up to 250 pounds if desired. This type of elevator can be made to handle packages just as fast as they can be put on, up to 500 or 600 per hour.

The Jeffrey Mfg. Co. build several varieties of this class of machinery for handling barrels, boxes, bags and general freight. It has constructed elevators for handling hogsheads weighing as much as 3,000 pounds.

This is a simple, cheap and efficient type of elevator for handling miscellaneous packages and anyone desiring prices and information should address the company direct.

#### WHEAT IN CANADA.

While the most extravagant estimates are made of the wheat crop of Canada this season, running up to 100,000,000 bushels, or double last year's crop, Professor Mavor of the University of Toronto has published in a British Blue Book a report on the present condition and future prospects of wheat growing in the Northwest of Canada, in which he does not hold out any great prospects of the Canadian Northwest Provinces ever being able to fully supply the wheat requirements of Great Britain. Among other things he says:

Very great improvements in the productive power of the country and a very considerable increase in the effective population, as well as a more exclusive regard to wheat cultivation, would have to take place before the Northwest could be regarded as being in a position to be relied upon to produce for export to Great Britain a quantity of wheat even nearly sufficient for the growing requirements of that country.

An exclusive attention and regard to wheat culture he believes to be extremely unlikely. Experience has shown the unwisdom of such a policy, and the tendency is entirely in another direction. For what surplus wheat there is Mr. Mavor anticipates that Japan will in the future enter largely into purchasing competition with Great Britain and the United States.

#### OFFICIAL PROTECTION.

The Dominion government has issued an order in council appointing an officer to act at Winnipeg as the representative of farmers shipping their own grain, the new officer, by the form of the order-in-council, to be regarded as the agent of any shipper of grain of his own production who may choose to avail himself of his services. His duties will be to advise shippers as to the results of inspection and reasons therefor; to return the shipper a portion of the inspection sample when required, and to in every way in his power advise with the shipper as to the best disposition of the car as to cleaning, handling in treatment, or advisability of bringing the matter before the Board of Survey. He will have access to the offices of the transportation companies for the purpose of taking up unusual delay in the transit of any car, or any loss by leak, bad order or accident. He will also be afforded all access to the office and records of the grain inspection. The shipper who desires the services of this officer must advise him promptly on making a shipment of the car number, date of shipment, quantity loaded and grade shipped, with particulars as to destination and consignee, etc.

Under the grain inspection law any shipper has

the right, when dissatisfied with the inspection return, to appeal to the Board of Survey, but farmer-shippers now feel that they will be in a very much better position and that a good deal of irritation will be avoided, since they have someone on the spot to see that no mistake is made, and to advise them of the best course to pursue.

#### JAMES TEMPLETON.

The vice-president of the Wisconsin Grain Dealers' Association, James Templeton of Templeton, is a typical western man of affairs. Born in Genesee County, N. Y., in 1842, he was taken to Wisconsin in the following year, where he lived the life of a farmer's son until he came of age, getting in the meantime such an education as the log schoolhouse in the woods had to give him. This was not, nor is, perhaps, all that a man might desire for his youth, but the life makes self-reliant men, at least, and also strong men of the boys who are good for anything.

Young Templeton on leaving the farm became a practical miller, but in 1868 went into business



JAMES TEMPLETON, TEMPLETON, WIS.

in general merchandise, which in turn in 1886 he left behind to go into grain. This has been his occupation ever since, with the exception of the years 1895 and 1896, when he was sheriff of Waukesha County.

The Arkansas City Milling Company bought a load of new corn on August 30. The corn was not hard enough for milling purposes and was bought for hog feed.

Chicago May corn means new basis. Trades on near futures are made in both new and old styles, but May corn trades are all in new style, although neither is specified. Old style allows only two mixed corn or better to be delivered. New style allows three mixed corn to be delivered at five cents discount, also three yellow and other grades.

On August 13 the Lackawanna Railroad announced that it would temporarily go out of the grain business in Hoboken, N. J., because the completion of the work on their grain pier made it almost impossible to lighter the grain from the cars to the canal boats. It will require from three weeks to a month to complete the work of reconstructing the old grain pier, and during that time the company will not handle any grain unless it comes in sacks or otherwise in shape to take off the cars while on the regular tracks. The company intends eventually to build extensive docks and elevators for the handling of grain in much larger quantities than heretofore. Just when the work on the new docks and elevators would begin has not yet been disclosed by the officials of the road, but the steadily increasing grain traffic, it is believed, will make them necessary within a year.

[For the "American Elevator and Grain Trade."]

## DOWN THE BLUE DANUBE, THROUGH SERVIA AND ROUMANIA.

BY FELIX J. KOCH, A. B.

It isn't very often anywhere in the world, but notably in the tourist section of Europe, that a steamship company will not be found anxious to



A DANUBIAN GRAIN BOAT.

carry a traveling newspaper correspondent over its route; but that is what happens to-day on the Danube. In fact, with all the opportunities for tourist travel that might accrue from an American describing to his countrymen the interesting lands "down river," they discouraged him from the jaunt.

"We would be only too glad to give you transportation," they said, "but there is nothing to be seen but grain, and grain, and grain, until your eyes grow weary; and you can make much better time on the railways."

Yet we persisted, and we went down the Danube to see the grain.

Before leaving Budapest, however, I had a talk with Dr. Szatagyi Aurel, or as we would say, Aurel Szatagyi, general secretary of the Danube Steam Navigation Company, on the matter of the freight traffic of the Danube. He said some things of interest to the grain men of the world.

"The bulk of the Danubian freight traffic, and the freight traffic is, of course, omnipotent on the river, is grain. On the Danube and its branches there are now plying about two thousand freight ships, with tonnage aggregating over one million tons, and some three hundred freight steamships of large carrying power. Almost all of these are given over to the transportation of grain. This vast grain trade is handled by two large companies and a number of smaller ones. Strangely enough, its volume to us remains about stationary, the increase in production each year being met by the increase of railway development and the serious competition offered by the steam cars. Although open the year through in 1902, the Danube is usually frozen over from November to February, and after the first of December only the great "sweepers," or heavy freighters, can be taken down. These boats hold between seven and eight thousand meter-centners, while the smaller and more common boats contain upward of thirty wagonloads.

"Quite a bit of American grain comes to us via Galatz. In fact, by the tenth of September, last year, we had received something like 200,000 meter-centners from your country, our local grain being used more exclusively for flour. From Galatz to Pesth the freight on grain is 120 to 220 centimes in 100 kilos, according to the stage of water in the river. The time likewise will vary from fourteen to twenty-one days. On the Danube freight is shipped in bulk and in 'detail,' grain going under the former category; and it is safe to say that over the Danube and its tributaries, in 1904, there passed between fifteen and twenty million meter-centners of grain, the amount of trade being governed by the price of the grain. Cattle

bound for all parts of Europe; probably five million meter-centners of wood, three million of stone and huge amounts of coal constitute the principal other river shipments."

Before going down river, however, I would see more of the grain men of Hungary, the farmers who raised the product for selling to the Budapest commission men. Having taken in the Buckna, the great grain belt to the west, I directed my steps northward to the smaller farms, in among the Tatra Mountains. Here, as is the case over the rest of Europe, almost without exception, each man raises grain primarily in addition to vegetables and his own table supplies.

It was the same story, over and over again, the fields of corn and wheat and alfalfa, with no fence, as we understand the term, but only an occasional long row of sunflowers dividing off the fields. At Poprad, in the Carpathians, I learned a bit about the grain trade. Everybody indulges in grain raising, no matter what else he may do—blacksmithing, apothecary or what not. Where one could not tend his acres himself, he hired day laborers, at a fixed rate of 48 cents per diem, and these went out to work about three in the morning. Horses were more popular here than the oxen, as one can get a pair of them for forty-eight dollars; and so the horse aided in the labor considerably. Breakfast, bacon and bread without coffee, would be taken before leaving home, and brandy would be carried out to the fields. Land hereabouts is sold



PLOWING IN BULGARIA.

by the old measure of the "joch," and a good farmer would own probably a hundred "joch" of grain land, valued at five hundred florins the joch, and probably five times as much of meadow. Ground taxes are low and there is much profit in the farming.

In the early autumn the harvest is made delightful by the songs of picturesque peasant groups, men and women and children, cutting the barley and the wheat, or bringing the long ears of corn for stacking up on the porches, where the red peppers are drying. Along the route to Rila Monastery, over which Miss Stone would have traveled had she not been taken, there are long, low sweeps of countryside that are particularly adapted to corn fields; and the peasants appreciate the fact to such extent that they have turned these fields into replicas of the old "Turkey Bottoms" of our own Miami Valley of a half century ago in Ohio.

Over Bulgaria and Servia, in Bosnia and the Herzegovina, the flail is in use, and out on the country roads, under an elm or maple, one will see a peasant or two beating the grain, or running his hard-hoofed pony round and round on the beaten earth, while his wife waves her headkerchief to blow off the chaff. It is primitive, indeed, and there would at first sight seem to be a splendid chance for American harvesters. In fact, far in the interior of the Balkan States, even in little isolated Monistir, more difficult of access, possibly, than Terra del Fuego, so far as customs and regulations are concerned, I have found advertisements

of our grain implements. But it must be remembered the peasant is extremely poor, that his acres are numbered, and there would be no more to buy if he had the money, and that present means suffice admirably; and so it is probable that the sickle and the flail will go on for a century or more in the Balkans, and the gypsy gleaners will continue to gather the aftermath as their ancestors did time out of mind.

### RECIPROCITY CONVENTION.

The National Reciprocity Conference, held in Chicago on August 16 and 17, was composed of a large and thoroughly representative body of men, the majority of whom, certainly, were deeply in earnest in making an effort to in some way break down the artificial tariff barriers at home and abroad, which now limit the expansion of American commerce and trade.

The first day's session was devoted mainly to addresses outlining the situation—the effect on American trade of foreign retaliatory tariffs as their answer to the abuses of our own tariff system. United States Senator Cullom of Illinois and Congressman Foss of Massachusetts both declared themselves opposed to the Dingley tariff in its present form, Senator Cullom saying he believed in reciprocity, that he saw the danger to American trade in foreign retaliatory tariffs, and favored an immediate revision of the tariff along the lines of the dual system of the Continent, known technically as the maximum and minimum tariff system.

Mr. Foss, a protectionist, as he declared himself, has long been opposed to "standpatism," which Governor Cummins of Iowa later declared epigrammatically was "not protectionism, but exclusionism," and favored the general policy of reciprocity treaties, although he recognized and deplored the fact that the ratification of such a treaty could not probably be secured from the United States Senate.

On the second day it was decided to organize the American Reciprocity Tariff League, the committee in charge of the formative work being composed of fifteen members to be appointed by the chairman, former Governor Packard of Louisiana, now a resident of Iowa, which committee shall be self-perpetuating.

The resolutions below endorse the principle of the "dual tariff." As the time for negotiating reciprocity treaties under the Dingley law has ex-



HARVESTING IN LOWER BULGARIA.

pired by limitation, although the principle was the subject of a sharp debate in the conference it was felt that it was the only remedy now practicable and so was agreed to. The attitude of the Senate to the reciprocity treaties was also sharply criticized. The resolutions are as follows:

The national reciprocity convention, representing more than 200 agricultural, commercial and industrial associations of the United States, by delegates assembled at Chicago August 16 and 17, 1905, hereby makes the following declaration of principles:

Whereas, The agriculture, manufactures, and other industries of this country have expanded to such an extent that they can no longer depend upon the home

market for the consumption of their entire product; and,

Whereas. The export trade has become a vital support to many of our industries; and,

Whereas. The present commercial attitude of the United States, largely owing to our failure to carry into effect the reciprocal trade provisions of section 4 of the Dingley law, is antagonizing foreign nations, whose good-will we desire and on whom we have hitherto depended as purchasers of our surplus products; therefore be it

Resolved. 1. That this convention, recognizing the principle of protection as the established policy of our country, advocates reciprocal concessions by means of a dual or maximum and minimum tariff as the most adequate and practical method of relieving the strained situation with which we are now confronted.

2. That the question of the schedules and items to be considered in reciprocal concessions preferably be suggested by a permanent tariff commission, to be created by Congress and appointed by the President, which shall consist of economic, industrial and commercial experts.

3. That it is the sense of this convention that our present tariff affords abundant opportunity for such concessions without injury to industry, trade or the wages of labor.

4. That we urge action upon Congress at the earliest time possible.

### SEED TRAIN RESULTS.

Apropos the results of his lectures in Iowa during the winter and spring on seed corn selection

this year, and next year I believe we will have accomplished directly and through the farmers who have followed our advice all we set out to do in a number of years. The seed corn gospel is to be spread again next year, however, and if enough is appropriated for the extension work of our school, I hope to see more than one train out during the winter and early spring months."

### THE BURRELL CABLE CAR-PULLER.

A pinch bar for shifting cars on switch, either for loading or unloading, is a device of the past, which has had its day of usefulness and now makes way, even at country grain elevators, for the car-puller, just as improved devices everywhere supplant those that are obsolete and wasteful of labor—energy.

The pinch bar was simple—a mere lever. So, too, is the Burrell Cable Car-puller, which the Burrell Manufacturing Company of Bradley, Ill., now offers the trade as a substitute for the pinch bar. The illustrations graphically describe the device better, perhaps, than can be done here with words. As the Burrell Company manufactures them in all



THE BURRELL CABLE CAR PULLER  
Made with Either Single or Double Drum.

and testing, Prof. P. G. Holden recently said to a reporter of the Des Moines Capital:

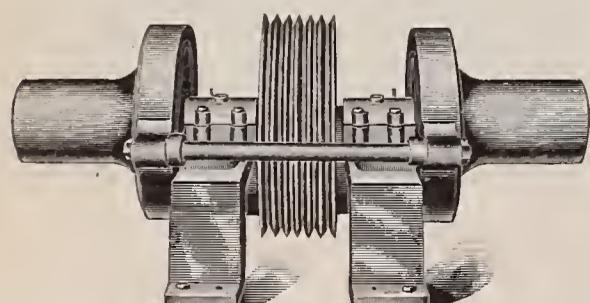
"I have been giving very close personal attention to the corn crop this season, and have visited fields in every locality in the state in which I lectured last winter and spring, and that means every county and in most instances several places in each county. I have gone out for the purpose of ascertaining how generally the farmers followed my advice as to the testing and planting of corn and to ascertain the results, and to do this I have gone into the fields and personally investigated, not taking anyone's word for conditions. I have

styles and sizes, from a capacity of three cars to that of twenty-five, the wants of all can be supplied on short notice.

The Burrell Manufacturing Company invite correspondence, and will be pleased to submit on application prices as well as any details of mechanism or other information that may be desired.

### THE FREIGHT BROKER.

That new creation, since the Elkins law became operative, the freight broker, has not been so much in evidence in the grain trade as in other lines of commerce, perhaps; because so long as the "elevator allowances" obtain he is not so much needed in order to nullify the law forbidding the payment of rebates. In Kansas City, the other day, however, the Commerce Commission began an investigation of the George L. Thomas Merchants' Transportation Bureau of New York, and thus uncovered an institution whereby, it is claimed, the big merchandise shippers of Kansas City alone receive in the neighborhood of \$225,000 a year in rebates on freight shipped from the East. Kansas City, however, is but one of many cities on the Missouri and Mississippi Rivers to have merchants included in the Bureau, and it is estimated that through this Bureau between 250,000,000 and 300,000,000 pounds of freight are annually routed to the 100 shippers who compose it. The Bureau is but three years old, yet in that time it has done more to disrupt freight conditions throughout the West than anything that ever occurred. With it as a lever the shippers of high-



BURRELL INTERNAL GEAR SAFETY CAR PULLER  
Made with Either Single or Double Drum.

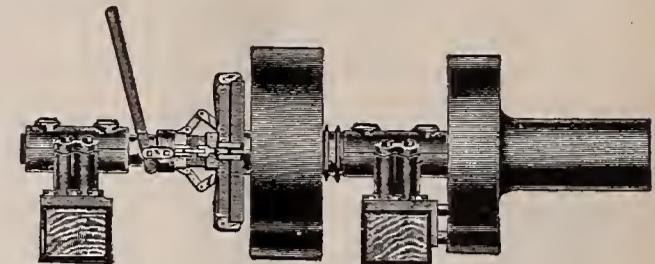
found that the stand is much better than in previous years.

"My observations as to stand and present condition of the crop will warrant an estimate of a 400,000,000-bushel crop if the weather continues favorable [until, say, September 15].

"We thought it would take six to ten years to show results, but we are going to show them

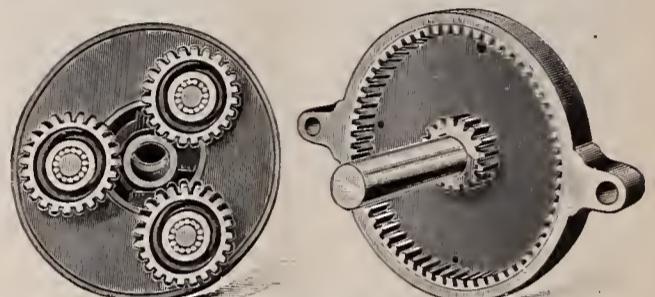
class freight have and are to-day practically nullifying all the laws under which the Interstate Commerce Commission is operating and violating injunctions issued by the federal courts.

The system under which the "freight broker" operates was explained briefly in these columns



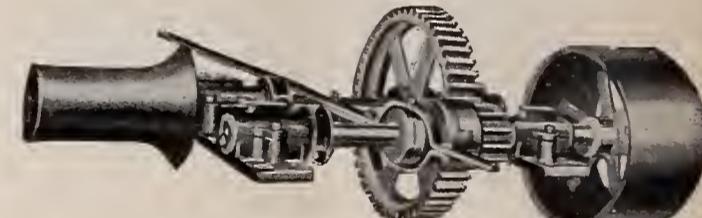
BURRELL INTERNAL GEAR SAFETY CAR PULLER  
Fitted with Friction Clutch

in June. The manager of the particular bureau named, one George L. Thomas, representing the railroads, is given 20 per cent of the rate on high-class freight from New York to Mississippi or Missouri River points, and this is returned to the shippers. While it is not definitely known what



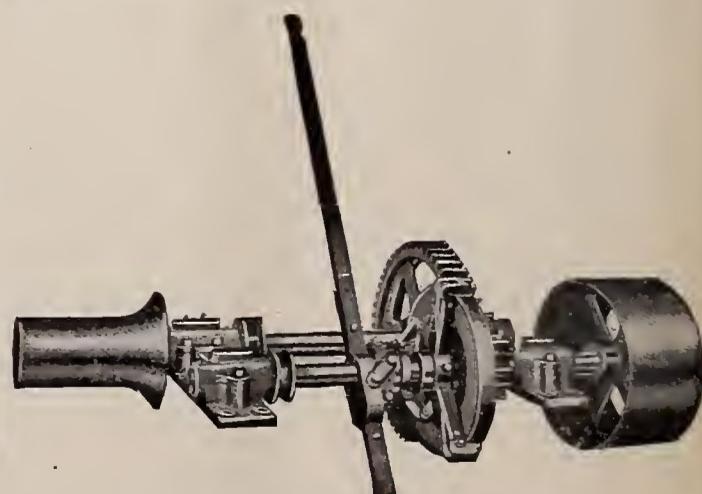
BURRELL INTERNAL GEAR CAR PULLER,  
Showing Construction.

Thomas' remuneration is, it is estimated to be \$500 a year from each of the 100 firms in his Bureau. If this is so, his income is \$50,000 a year, or as much as is paid the President of the United States. Thomas does all the routing of the freight and ships the goods over the road which will give



IMPROVED CAR PULLER WITH JAW CLUTCH  
AND LEVER.

him the best commission. The shipper pays the regular freight rate to the railroad, which in turn pays Thomas 20 per cent or better commission, and he sends this to the shipper. In the instance of the shipper who received sixty cars in fifteen days the freight amounted to 2,400,000 pounds, for



THE IMPROVED CAR PULLER  
Fitted with Friction Clutch.

which he paid to the railroad \$35,280, but will receive, if he has not already done so, a rebate of \$7,056. There is little chance for the small shipper, who must pay the flat rate, to compete with the big fellows under such a system as this.

Sooner or later it will become a thorn in the flesh of the grain dealer as well as the small merchant.

[From the "American Miller."]

## INSECT ENEMIES OF CEREALS AND CEREAL PRODUCTS.

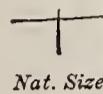
BY WILLIAM BRUNSCHEID-KRATOCHWILL.

The different varieties of grain have many insect enemies, which cause great damage during the growth of the plant, while the grain is in store, or to the products manufactured therefrom. Fortunately, all of them are not in evidence each season in any one locality. However, each spring in granaries, flour mills, storehouses and bakeries, these undesirable guests usually appear in considerable numbers, and this is the writer's reason for discussing the insects which damage the grains and their products while stored and while in the process of manufacture.

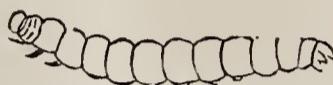
The grain moth, known also as the white grain



Magnified.



Nat. Size.



CATERPILLAR.—Magnified.

WHITE GRAIN MOTH—*TINEA GRANELLA*.

worm (*Tinea granella*), is one of these dangerous enemies which threaten cereals in both the eastern and western portions of the globe. It resembles the clothing moth, being a very small, night butterfly, with a yellow head, darkly crossed grayish forewings and brownish hindwings.

The female lays twice a year, in May and in August, each time depositing about 60 little eggs in the crease of the grain. A few days after the first egg-laying small, pale-yellow larvæ make their appearance and in the course of about eight weeks develop into butterflies. The worms of the second egg-laying, however, pass the winter in corners and cracks and crevices in the rafters, walls, machines, spouts and other places about the mills and elevators, in a web made of wood fiber, bran, flour and similar stuffs, and not until March, April or May of the following year do they become perfect moths. The worms, which are about one-half inch long and white in color, make of animal and plant waste hairy cases, which they drag with them and from which but a portion of their bodies protrude.

They live on the grain and each insect requires several kernels to nourish it through its life. Their voracious appetites and the uncleanliness resulting from their webs being spun over the surface of the stored grain make the white grain worms very serious enemies of breadstuffs.

Diligent sweeping of the walls, ceilings, spouts, floors, machinery, etc., killing the moths and worms, strict cleanliness and rational ventilation, as well as frequent mixing and shoveling of the stored grain in cool, dry weather, are the best means of keeping down this pest. Painting the walls and ceilings with tar or placing tarred boards about the buildings infested by the worms are also efficient methods of preventing the increase of the white grain worm, or grain moth.

Very similar to this grain moth is the false wheat moth. It is a trifle lighter and its larvæ penetrate into the interior of the grain kernels, bollowing them out and leaving them when developed into complete butterflies. These insects are also very injurious, but may be kept down by the same methods used to prevent the increase of the first described moth.

Another grain destroyer is the so-called black rye bug, or weevil (*Sitophilus granarius*). It is a small, apparently lifeless, bug, with short, strong feet, several feelers and a strong trunk. In early

life it is reddish brown, but later becomes dark brown.

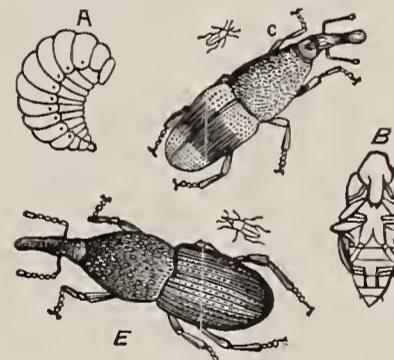
From spring to autumn the female deposits 150 to 200 little eggs, each in one kernel of grain, beneath the upper skin, on the end of the crease, near the germ. In about a week's time the larva is hatched. It has a large, yellow, scaly head, and is extremely destructive in the granaries of Europe and America. It penetrates into the interior of the grain kernel, consuming the entire flour content, emerging from the shell in about six weeks as a fully developed bug. The bugs then pair themselves, the male dying on the day of the pairing and the female the day after the last egg is laid.

It has been proved that from one female bug, in the fourth generation, consequently within two years, will be reproduced 320,000 descendants, destroying more than 320,000 grains of wheat, rye, barley, maize or spelt. Ruedow, a Russian chemist, found in 100 average grains of Bessarabian rye 28 that had been inhabited by the worm of the black rye bug, or more than one-fourth of the entire number.

These bugs prefer warmth and darkness and are seldom found on the surface of stored grain, but generally live a few inches below, where they pair, lay their eggs and join their larvæ in the destructive work of grain eating.

These insects may be destroyed by strewing upon the infested grain fresh dry hay, hemp blossoms and fir boughs; by placing tarred boards near them, and by burning sulphur or chloride of lime in the infested buildings. Another corrective measure is to open the doors and windows of the building in extreme cold weather for a week or so. Sprinkling the infested grain and walls and floors of the storehouse with benzine may also be practiced. These insects are attracted by the odor of moistened, slightly green barley and small heaps of this may be used to entice them into corners, where they can be caught and killed.

None of these means, however, are entirely successful in destroying the insect. They are all more or less expensive and troublesome and do not always give the desired results. Cleanliness and fresh air, secured by proper ventilation; painting with turpentine and shellac, washing the interior



GRAIN WEEVILS—*CALANDRA GRANARIA*

of mills and granaries with a thick lime milk in the late fall in order to fill up the cracks and crevices, which are the hiding places of the bugs; frequent shoveling and mixing of the stored grain in cool, dry weather, remain always the surest and best remedies against the appearance of this small and highly dangerous insect.

The French scientist, Bouhardet, recommends a temperature of 80 degrees Reaumur for the purpose of killing the bugs and the larvæ without spoiling the grain.

To determine whether grain is infested with this insect, it is only necessary to place samples in covered glasses and set them in a warm place. In a few days the warmth will induce the bugs to leave the grain and come out where they may be seen.

Iowa cattle and sheep feeders are reported to be buying stock freely in anticipation of plenty of grain. An unusually large number of sheep will be fed this fall and next winter.

## SPELT.

Although spelt is a grain belonging to the same family as our common wheat, it is not much used for human food anywhere. The true spelt (*Triticum spelta*) is often confounded with emmer in this country, where neither is very common, and both generally fed to stock.

Spelt grows to the average height of wheat and has a hollow stem. The leaves are of ordinary size, usually smooth. The heads are loose, narrow and rather long, and both bearded and bald. The spikelets are usually far apart in the head, arched



(*Triticum spelta aristatum*)

(*Triticum spelta multiforme*)

on the inner side, and usually contain two grains. The grains are light red in color, somewhat compressed at the side, with a narrow furrow, the walls of the furrow being flattened and with sharp edges. The grain is always tightly held within the chaff and cannot be hulled in threshing.

This latter quality is what renders spelt of possible value to agricultural and milling interests. In the Pacific Coast and Rocky Mountain states the most serious trouble with otherwise good wheats is the "shattering" at harvest. Some wheats that are excellent from every point of view are worthless in some localities because of the great loss from shattering. Some other wheats, on the contrary, that do not suffer from shattering are not desirable from an agricultural or milling standpoint. Consequently, spelt, of which there are both spring and winter varieties, possesses a quality which it is highly desirable to introduce in the bread wheats of some sections, and it has been found that this can be done.

Experiments have also shown that in addition to preventing loss from shattering, the introduction of the spelt element adds to the element of constant fertility or well-filled heads. Some winter varieties of spelt are also very hardy. On the other hand, the undesirable qualities of spelt are the brittleness of the head and liability to rust. In crossing spelt with common wheat, both the good and bad qualities must be considered.

The country grain shipper earns every dollar he makes. And many don't make a great deal on account of being lenient with the farmer. Just now shippers in some sections are obliged to buy damp, musty and rotten oats, but we hope they won't pay too big a price for them. It may be best to ship them to a nearby market. White wheat and red mixed with white seems to more plentiful than ever before. We are receiving some from sections in Ohio and Indiana that never before raised it. It may be true, as the farmers claim, that it yields better than red, but it does not bring as much; especially is this true of the off grades.—Zahm & Co., Toledo.

## COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

### SELLING ON TRACK PREFERRED.

*Editor American Elevator and Grain Trade:*—Our experience has been that selling on track bids is better than consigning.

Respectfully,

BERNE GRAIN & HAY CO.  
Berne, Ind.

### MICHIGAN CONDITIONS.

*Editor American Elevator and Grain Trade:*—In this locality the farmers seem inclined to sell on early market, especially wheat.

We prefer selling our grain outright to consigning. This method has proved more satisfactory to us.

Yours truly, BABCOCK GRAIN CO.  
Reed City, Mich.

### OFFICE REMOVAL.

*Editor American Elevator and Grain Trade:*—Please take notice that the offices of McCord & Kelley, J. W. McCord, the Ohio Grain Dealers' Association, Ohio Shippers' Association and the Ohio Grain Dealers' Mutual Fire Insurance Association have been moved to Suite 511-516, fifth floor, Union National Bank Building.

Yours respectfully, J. W. McCORD, Sec.  
Columbus, Ohio.

### GOES TO DAVENPORT.

*Editor American Elevator and Grain Trade:*—I have been employed by the S. Y. Hyde Elevator Company, at La Crosse, Wis., for the past two seasons, having had charge of their terminal clearing house at that point. But as that firm has sold out and retired from the grain business, I have accepted a like situation with the D. Rothschild Grain Company of Davenport, Iowa, to act as superintendent of that company's barley house here.

Yours truly, E. D. RAU.  
Davenport, Iowa.

### SELL ON TRACK BIDS AND ALSO CONSIGN.

*Editor American Elevator and Grain Trade:*—There are times when we ship everything that we have to sell in Eastern markets on commission, and at other times, when we think the market is on the down turn, we sell on card bids; and it would be difficult for us to say which is the more satisfactory. We like both plans and use whichever looks the best to us at the time we are shipping.

Yours truly, BOSSEMEYER BROS.  
By E. Bossemeyer Jr.  
Superior, Neb.

### BOARD WEIGHING IN KANSAS CITY SATISFACTORY.

*Editor American Elevator and Grain Trade:*—The weighing of grain in this market has never been more satisfactory than while under the direction of the Board of Trade weighing bureau, where every man's job depends upon the efficiency of his work, and where thorough experts are employed for constant testing of scales and the prompt adjustment of same as soon as found to be the least bit out of order. So universally has this become known that Kansas City enjoys a reputation for good weights, surpassing any other market not employing the same method.

In my opinion, a state bureau of weights is a part of a political machine where a man's political pull counts for more than his knowledge or experience in the department in which he is employed. If the law should compel weighing by state weighers, it would be only an additional tax on

the grain, as this market could not afford to give up its weighing bureau and the reputation it has gained for good weights, even if state employes are forced upon us.

Yours truly, MURPHY GRAIN CO.  
By Wm. Murphy.  
Kansas City, Mo.

### A RECORD CAR IN NEW YORK.

*Editor American Elevator and Grain Trade:*—The following memo. may be of interest. It is the record of arrivals at New York:

"C. B. & Q. car No. 96433 was billed from Logansport, Ind., on August 12, containing bulk oats. On arrival at Pennsylvania Railroad Elevator at Jersey City its outturn was 80,420 pounds, or 2,513 bushels and 4 pounds. The largest car-load of oats hitherto reported on the New York Produce Exchange was 2,509 bushels, arriving on the Erie Railway lately.

"Yours truly, ROBT. A. SHIRREFS,  
"Jersey City, N. J. Supt. Elevator."

### THINKS BOARD WEIGHTS PREFERABLE.

*Editor American Elevator and Grain Trade:*—While perhaps I am hardly competent to give an expression on the question of weighing, as to which would be the better, state weights or Board of Trade weights, as we have never had state weights, I am rather of the impression that Board of Trade weights would be better than state weights for one reason, and that is this: That the Board of Trade would get more competent men, perhaps, to do the weighing than the state would on account of politics, if nothing else.

Yours truly, T. P. GORDON.  
St. Joseph, Mo.

### LIKE TO SELL ON TRACK BIDS.

*Editor American Elevator and Grain Trade:*—The outlook is that the grain business is going to be good and business will be limited only by the supply of cars, as crops of all kinds are good. Farmers will hold back grain until the prices are satisfactory to them, which they have done in the last few years.

We have found it more satisfactory to sell our grain on track bids than to consign. Our bids to farmers are based on track prices, and when we buy and sell on them we have our profits secure.

Yours truly, L. T. HUTCHINS & CO.  
Sheldon, Ill.

### ST. LOUIS OPPOSED TO STATE WEIGHING.

*Editor American Elevator and Grain Trade:*—The question of the weighing to be done by the Missouri Railroad and Warehouse Commissioners in the state of Missouri is a hard problem to adjust satisfactorily, as we believe country shippers in general prefer to have Merchants' Exchange supervision. It is an imposition, however, on the owners of grain to compel them to pay for both Merchants' Exchange and state inspection. We hope this will be arranged so that one charge or the other will be waived for the benefit of the trade here.

Yours truly, F. L. WALLACE & CO.  
St. Louis, Mo.

### ILLINOIS FARMERS HOLDING OATS.

*Editor American Elevator and Grain Trade:*—The prospects for the growing crop of corn in this section are very good, and trade will be brisk when it moves, which will probably be earlier than it was last year.

The farmers are inclined to hold on to the oats since the decline, and our purchases since then almost are nothing. The farmers are too independent to part with their grain at a sacrifice, and they are not inclined to contract their new crop of corn very freely yet. Price is about 33 cents in the country for delivery when in condition.

We have always favored leaving our grain in our elevators in preference to consigning—hedging with futures until we found a good place for it. We

can generally do better on our track than to consign. Of course, we want to trade with good parties.

Yours truly, E. R. ULRICH & SONS.  
Springfield, Ill.

### SHIPPERS ON C. H. & D. HANDICAPPED.

*Editor American Elevator and Grain Trade:*—Shippers located on the C. H. & D. System in Ohio are in sore straits. The C. H. & D., having withdrawn several routes to Eastern points, is compelling shippers to pay sixth-class rate up to the junction point of the connecting line, and from each junction point regular grain tariff rates are charged. In many instances the cost of delivery at certain Eastern points is more than double the original through rate which obtained before the C. H. & D. adopted such arbitrary measures.

Respectfully yours, J. W. McCORD, Sec.  
Columbus, Ohio.

### RAILROADS AND THE ASSOCIATIONS.

*Editor American Elevator and Grain Trade:*—The outlook in the grain trade for the next few months is very flattering, for several reasons, first of which is the harvesting of heavy crops of wheat and oats, and the almost positive assurance of the maturing of the largest corn crop the country ever produced. Next, from present indications the foreign demand for our grain of all kinds will be heavy. Then the railroads, owing principally to the enforcement of the car service rules, are in better shape to handle the crop than ever before.

I want to say here that the railroads have the grain associations to thank for being able to enforce the rule, as they have always advocated it and urged the railroad people to enforce it; besides; they have educated the country shipper to look at the enforcement as a blessing rather than a hardship on them, and they would not now want to go back to the old way.

Now about selling "Track vs. Consigning." There could be a good-sized book filled with different opinions and different reasons, but my own experience for the past ten years is that I have met with best results, and the business has been most satisfactory to me, by selling "track." Only one year in the ten have I found it more satisfactory to consign. Sometimes location has as much to do with results as anything else. Some may say "location has nothing to do with it," but I know it has.

Yours truly, Hamburg, Iowa. D. HUNTER.

### THE VESSEL OWNERS' BOYCOTT OF DETROIT.\*

*Editor American Elevator and Grain Trade:*—The Board of Trade has appointed weighmasters at each elevator to attend to the weighing in and out of grain in carlots. No supervision of weighing cargoes has ever been established, as the vessels always employ a man of their own to attend to it. No complaint has ever come to this Board or to any member of it, as far as I can ascertain, of shortage, from either vessel owners or their associations. Had there been such complaints, the Board would gladly have joined with them in appointing a weighman for that business.

The Vessel Owners' Association has seen fit to declare a boycott on Detroit without even filing a complaint or a notification that there was anything wrong. No comparison has been spoken of except with the port of Buffalo. There are ap-

\*It has been published broadcast by the daily press that Chicago vessel owners, and tentatively all grain carriers to Detroit, would refuse shipments to that port unless the shipper guaranteed that the shortage there would not exceed one-half a bushel per 1,000 bushels. It is claimed by vessel men in Detroit newspapers that there has been a steady run of excessive shortages for at least two months, the expense of which is charged to the vessel. The above is the other side of the controversy.—Ed.

parent reasons why there should be small average shortages between Chicago and Buffalo. How Detroit compares with other ports we do not know, but we are trying to ascertain from the vessel owners.

We believe that the Detroit elevators stand as well with shippers and receivers generally over the country as those of any in the country. At any rate, we have no proof whatever as yet that they are not fully as reliable and honest in their weights as the elevators which load the cargoes at shipping points.

The four elevators here are all public ones, and their proprietors are in no way interested in the grain business.

Yours truly, L. A. PARSONS, Pres.

#### THE WEIGHING CONTROVERSY IN MISSOURI.

*Editor American Elevator and Grain Trade:*—The Missouri end of the controversy between the states of Missouri and Kansas and the Kansas City Board of Trade is substantially as follows: The railroad and warehouse commissioners are endeavoring to enforce a law which was enacted in 1899 and which has never been in force. They base their authority on an opinion rendered by Attorney-General Hadley.

Back before my time the Missouri inspection department had weighmasters in some of the elevators in Kansas City, but their work was so unsatisfactory and unreliable that the Kansas grain dealers finally sent me to supervise the weighing of grain. Their work was all right, as far as they went, but they were not able to cover the field and had no authority to sustain them.

Previous to this time the Missouri inspection department withdrew its men and the weighing of grain was in a demoralized condition, and the Board of Trade had to take some measures to rectify the wrongs that had been and were being done. Therefore they appointed a committee to investigate in the various markets their mode of doing business, and they finally recommended the establishment of a weighing department. On November 4, 1901, the weighing department was started.

The state of Missouri made no attempt to cover these elevators until September 1 of this year. At the present time we have the weighing of grain in a good, sound, healthy condition and our weights are recognized as being equal to any in the country. Now the state steps in and wants to put its men in all the houses and wishes the Board of Trade to withdraw so they may be able to collect a weighing fee and thereby establish a political machine. A large majority of the men that have been put to work at the present time are incompetent and not fit to be around an elevator.

Last winter the legislature passed a bill known as Senate Bill No. 296, to amend Sections 7630, 7638 and 7661 of Article 3, Chapter 117 of the Revised Statutes of the State of Missouri of 1899, so they could cover all these industries, but at the eleventh hour Governor Folk vetoed this bill. Then the Railroad and Warehouse Commissioners got the Attorney-General to give an opinion which was published in the daily papers of May 4, holding that the law did not apply to grain inspected and weighed in and out of public elevators. The Attorney-General now turns around and reverses his opinion, and under these conditions, as I stated, they are trying to make a lot of political jobs.

If this law is good, which counsel informs us it is not, and they would have enforced it in the first place, the Board of Trade would not have had to take it in their hands and rectify the wrongs that were being done, but they made no attempt to do so. They wait until we have everything properly established and now wish to step in. As it is, the weighing department is a credit to the grain trade, as it gives honest and faithful service and treats all alike, but the Railroad and Warehouse Commissioners say they want the jobs. In the meantime counsel advised us not to pay the state weighing fee, as the law is not a good law.

I presume the case will be heard in the October or November sitting and the Supreme Court will have a final hearing as far as the state of Missouri is concerned.

In the meantime the department goes on the same as it has done, testing scales, keeping the same in repair and looking after the loading and unloading of cars and see that repairs are kept up on all elevator equipment that has anything to do with the weighing of grain. If it steps out and allows the state to take hold, it would be a very little while until things would be as bad as ever and they would ruin our market. As it is, the Board of Trade is going to fight the case to the finish. This is about all as far as Missouri is concerned.

On the Kansas proposition, there are a great many elevators that have some country stations. They buy this grain from the farmer and it is weighed at point of origin. The grain is shipped in here and goes in their own elevators. The state of Kansas compels this line house to have this grain weighed by them and charges them a fee of 50 cents and also a fee of 50 cents out, which is unnecessary as far as the owners of the grain is concerned, but is only an additional cost in the product; for 99 per cent of this grain is interstate commerce, which also applies to Missouri.

Our attorney took the case to the United States District Court before Judge Pollock to test our rights under the interstate commerce act, and up to the present time we have got the best of it. We are now going ahead and will apply for a permanent injunction restraining them from weighing this grain.

We take the stand that if the country shipper desires his grain weighed by the state of Kansas and will pay the fee, we are perfectly willing they should weigh same. If not, the Board of Trade members and elevator operators object to the levying of this extra fee.

Yours truly,  
Kansas City, Mo. J.

#### IOWA NEWS ITEMS.

*Editor American Elevator and Grain Trade:*—C. C. Feil of Charles City has completed a 10,000-bushel elevator at Doubleday, Iowa.

York Covey, Stacyville, has made extensive improvements and enlarged his capacity.

Thomas Cashman of Goodell has sold his elevator at that station to J. Hansen and bought an elevator of Moore Bros. at Hayfield. This house has been closed for some time. He is overhauling and putting it in good condition.

Slaba & Dresman of Buffalo Center is a new firm with a new elevator at this point. They are located off the railroad now, but expect to force a location soon.

C. A. Pfund, Luverne, has changed from steam to gasoline power and made extensive improvements.

Demiug & Umphrey is a new firm at Hancock, Iowa. They have recently bought out C. H. Cooper & Son and took possession August 1.

The Younglove Construction Co. of Mason City have the contract and began building for a new farmers' company at Barnum. They purchased the old warehouse of the Western Elevator Co. This will adjoin the new building.

M. D. Gurnett, Barnum, has finished a cribbed addition to his elevator, which doubles his storage capacity.

Yours truly, R. D. L.

#### STRONG OPPOSITION TO STATE WEIGHING AT KANSAS CITY.

*Editor American Elevator and Grain Trade:*—There is almost united opposition in this market to state control of the weighing of grain of private industries in Kansas City. Public elevators, of course, are in a different class; and yet these elevators, rather than pay this onerous tax, threaten to cancel their bonds and become private houses. We feel that the Board of Trade weighing department is maintaining a well conducted institution,

and everything is being done at all times to maintain the very highest standard in the matter of weight supervision. Confidence is established in the Kansas City Board of Trade weights all over the country, and we fail to see how the state system would improve matters any.

In addition to this would come the extra state fees, and it is doubtful if the market can stand so many terminal charges when the efforts here have been toward reducing to every possible extent terminal fees.

Kansas City used to have a bad reputation for weights, and, as we understand it, the state could have taken this matter in hand years ago, and if at that time state officials had demonstrated that they were competent to weigh grain correctly and give satisfaction, as the Board of Trade department has done, the establishment of a Board of Trade department would have never been necessary.

Yours truly, W. S.  
Kansas City.

#### STATE WEIGHING AT ST. LOUIS.

*Editor American Elevator and Grain Trade:*—The Missouri Railroad and Warehouse Commissioners have issued the following order:

St. Louis, Mo., September 1, 1905.  
Under an opinion recently rendered by the Attorney-General of the state of Missouri, it is the duty of this department to supervise the weighing of all grain and hay shipped into or out of the city of St. Louis, Mo.

Acting under the law upon which this opinion is founded, on and after September 1, 1905, the charge for weighing grain will be 35 cents in and 25 cents out per carload; and on and after September 11, 1905, the charge for weighing hay and grain in wagons will be 20 cents per wagonload.

No charge for weighing grain in sacks in elevators.

By order of the Railroad and Warehouse Commissioners of Missouri.

(Signed) O. J. MILLER,  
Chief Deputy Inspector.

This notice to the effect that state supervision of weighing will prevail on all grain and hay shipped into or out of St. Louis, whether weighed at public or private elevators, mills and warehouses, or hauled from cars unloaded from track and weighed on wagon scales, has resulted in some opposition on the part of some of the members of the Merchants' Exchange. At present it is impossible to predict to what length this opposition may be carried. Of course, as in all such matters, there is a difference of opinion among the members of the Exchange, some claiming that the supervision of weighing by the Merchants' Exchange weighing bureau is satisfactory and should be continued, while, on the other hand, others contend that it would be useless to contend against a measure that is backed up by the state of Missouri. Both sides await developments with interest.

Yours truly, X.  
St. Louis, Mo.

#### THE ATTACK ON KANSAS INSPECTION.

In overruling the demurrer in the case of the Midland Elevator Co. and others against the Kansas Grain Inspection Department—an action designed to legally abolish Kansas state inspection of grain, Judge Pollock of the Federal Court at Topeka held that the section of the law classifying grain elevators in that state by their size is invalid.

The Kansas grain inspection law, passed in 1897, provided for state inspection of grain in all elevators having a capacity of 75,000 bushels or more. Judge Pollock holds that this classification is unconstitutional. An elevator with 74,999 bushels' capacity is exempt from the operation of the law, while one with one bushel more comes under the law.

The next point to be settled is whether grain elevators are public or private concerns.

It is announced that the Cincinnati starch plants of the Corn Products Company will not be reopened.

[For the "American Elevator and Grain Trade."]  
**STATUS OF GOLDEN AND RUSSIAN GREEN OATS.**

BY GERSTENBERG & CO.

Your request to favor you with our views as to the selling merits of golden and Russian green oats, as compared with white oats, is readily complied with.

In the past five years the quantity of golden and Russian green oats raised in Iowa and southern Minnesota has steadily increased; in fact, the percentage might almost be placed as high as 60.

When these varieties were first grown, it was claimed that the ripening period was shorter, the yield larger, and that they were not likely to lodge as readily as other varieties. These statements, at that time, may have been correct. The trade then did not discriminate against them so severely as they do at the present time. Since then conditions have changed, and we now are confronted with discrimination against their quality, as the consumer refuses to purchase them except at a discount, and then desires clean, sweet and bright (lively) color only.

These qualities are scarce. Failure to use clean, sound seed has helped to produce a mongrel quality, it being neither bright golden nor Russian green. Instead, we have before us daily a dark grain of varied color, appearing as if it had lodged and become discolored by dust and dirt, and having none of the qualities that draw a buyer.

It has been claimed that the cereal companies are free users of such oats. Our experience is to the contrary, the companies absolutely refusing to buy them, claiming that they produce a meal that is streaky and has the appearance of being unclean and moldy. Efforts made in the past to use them have resulted in the finished product having been returned, and to dispose of it it was necessary to mix it with their grades of cheaper feed.

The present inspection of these varieties is an injustice to the raiser of white oats. But this will in all probability be soon rectified, as this question of inspection has been discussed freely in the past year. The varieties of oats under discussion ought to be graded in a separate class, thereby permitting the members of the trade to know the quality they will receive on their contracts.

As to their selling value, when comparing them with good white oats, that varies. Sweet, sound, white oats are always in demand, finding ready sale at all times, with good premiums obtainable. Golden or Russian green oats at no time meet with that demand and are salable only at a discount of one-half to one and one-half cents per bushel, depending on quality and the quantity of foul seeds they contain. Former buyers, again, now prefer black or mixed oats, claiming that their soundness and their being sweet make them the preferable grain.

We have advocated strongly in the past five years that better selection of seed would soon become necessary, but at that time we were informed that the larger yield per acre, with same market value, made these oats more profitable for the raiser and dealer. Time has proven that this was not correct.

Illinois still raises the best quality of oats and they consist almost exclusively of the white variety. The demand is ever ready to take such grain at full prices. The honor for this is due to the energy of the grain dealer, who is further helped by the grower, who at all times is ever ready to try and raise a grain that is a credit to his ability as a tiller of the soil.

Certain grain thieves who have been stealing wheat from freight cars in South Chicago railway yards, and who have been hotly pursued by detectives, escaped capture after an exciting chase by private detectives and policemen on August 18.

Four thieves had loaded a rowboat with stolen wheat and were pulling up the Calumet River when Detectives Boyle, Robbins and Miller of the Grain Shippers' Protective Association and two city policemen set out in a steam launch in pursuit. Seeing they could not overhaul the fleeing boat before it made shore they brought revolvers into play. The fugitives replied and a naval battle was kept up for several hundred yards before the piratical craft was beached and its crew escaped in the scrub timber along the river's brink.

### THE NEBRASKA INQUISITION.

As previously noted in these columns, Attorney-General Brown of Nebraska in August applied to the Supreme Court for an injunction to restrain the Nebraska Grain Dealers' Association from "doing business" in that state. The Association was given until September 18 to make answer; meantime a temporary injunction was issued by Justice Barnes, and August 15 was set for the state to take depositions at Lincoln.

The leading witness on this occasion was C. T. Peavey, formerly traveling auditor for the Omaha Elevator Company. Mr. Peavey talked freely of rebates. "To my knowledge," said Mr. Peavey (we quote from his testimony as reported by the Lincoln Star), "since the organization of the Omaha Elevator Company it has never been without that source of income. At the time of its organization it bought an elevator which was bonded for thirty years at 8 per cent and issued besides \$200,000 worth of stock. The money to incorporate and start in business was borrowed from an Omaha bank. At the beginning the company got an agreement from the Union Pacific Railroad to pay 1 cent a bushel on all grain handled over its lines, no matter where it came from or whether the elevator company had ever handled the grain or not. This agreement continued in force until the road went into the hands of a receiver, when it was discontinued. Then for three or four years the Omaha Elevator Company received 2 cents per 100 pounds on all grain the company actually handled over the railroad line. This was afterward cut to 1½ cents per 100 pounds, and I believe that arrangement is still in force."

This was only incidental, however, for Mr. Peavey said nearly all the "big elevator companies" got rebates; those who did not were not among the "favored companies."

Mr. Peavey then went into the various ways adopted by the line elevator companies to keep competitors on their good behavior when a line company entered a station and demanded an "equal share in the business."

T. D. Worrall of Lincoln, who is behind the Nebraska foolishness, had previously testified in relation to the so-called "slush fund" used in Lincoln during the session of the legislature. Some money was raised—in the neighborhood of \$4,411, according to Mr. Worrall—but he testified under oath in a positive manner that not one cent of this fund was paid to any member of the legislature. The greater portion, he stated in a general way, went for the purchase of copies of bills aimed at the grain trade, for theater tickets, band concerts, dinners and other forms of entertaining the members. A tab was kept on the committees which had charge of the obnoxious grain bills, and whenever it was thought the committee might meet and the bills come up for discussion, a theater party was organized, a dinner given at the cafes of the Lincoln or Lindell hotels, and in this way the committee kept from meetings to consider the bills. This was bribery with a vengeance, to be sure! Wonder what the honorable members from Cook County, Illinois, would think of this ice-watery sort of gumshoe campaign!

Having obtained so much light, the inquisition was postponed for a week, when C. Y. Long of Lincoln was heard. He told all about the "carding system." He had been an employee of the Nebraska Elevator Company until July, 1904. As

to these cards (bids) he said that at the meetings of the Nebraska Elevator Company's and the Central Granaries Company's representatives to fix the card prices, no other concern was consulted about the prices, and the secretary of the Nebraska Association never took part in the fixing of these card prices. Occasionally where a dispute was on at some station the dealers at that station were often consulted about prices for that one station.

After Mr. Long had been pumped dry, Rodney K. Johnson, the star witness, for whose presence the proceedings had been delayed a week, testified. Mr. Johnson was a competitor of the Omaha and Nebraska Elevator companies at Valparaiso. Things at Valparaiso were not all of the milk and honey sort, for Mr. Johnson was inclined to buck without having quite roll enough to do it with effect. Still he was of the "go-some" sort, and finally some of the big guns in the trade had to call on him. Then he agreed to be good on the usual terms. But the secretary, the executive officer of the Nebraska Association, had nothing to do with this settlement, he said, which was made before there was any Nebraska Grain Dealers' Association, although it continued after the latter's birth.

In all this testimony nothing seems to be at all pertinent or valuable on any account save the general views of Mr. Long or how the card prices were made. We quote from the Lincoln State Journal:

"How were the prices determined?" asked Attorney-General Brown of Mr. Long.

"They were fixed by the Central Granaries Co. and ourselves; that is, when I say ourselves, the Nebraska Elevator Co."

Q—The Central Granaries Co. does business in Lincoln?

A—Yes, sir.

Q—About how often would you have conferences with respect to those prices?

A—Well, that would depend upon the market. When the markets changed the prices changed; when the market remained the same there were no cards sent out; but when the prices changed we got our reports from Kansas City, and we made out card prices in consonance with the report.

Q—Let me see if I understand you. They fixed not only the prices that were paid for all grain by the agents of the Nebraska Elevator Co., but also the price that was paid at the same stations by your competitors?

A—Yes, sir; we fixed the price for all the territory that we carded.

Q—Including the price to be paid by your competitors as well as yourself?

A—That is it; and the prices were always the same unless it was as I stated, to even up.

On September 18 the matter will be again taken up at Lincoln.

### SANTA FE ELEVATOR BURNS.

One of the most destructive grain elevator fires that has been experienced for a good many years, excepting only the loss at New Orleans last February, occurred in Chicago on September 9, when fire destroyed the Santa Fe elevator at Twenty-seventh and Wood streets on the banks of the South Branch of the Chicago River. The elevator was well filled with grain, as receipts had been heavy for some time preceding the fire. Several strings of cars would soon have been unloaded into the house, but these were hauled away by engines and saved.

The elevator was of steel frame, covered with corrugated iron, and had a capacity of 1,500,000 bushels. It was under the control of the Harris-Scotten Co. of Chicago.

The fire was discovered early in the morning; and although forty fire engines were soon at work, the flames made such rapid headway that an hour after the alarm was sounded the floors collapsed and soon after the sides gave way and thousands of bushels of grain were poured into the river.

Nearly 900,000 bushels of grain were in the bins, the approximate figures being 300,000 bushels each of corn and oats, something in excess of 200,000 bushels of wheat and 50,000 bushels of rye and

barley. The money loss on the grain is estimated at from \$450,000 to \$500,000. To replace the elevator will cost \$250,000 to \$300,000.

Various theories have been advanced as to the cause of the fire, but nothing definite is known. The boilers and driers were but slightly damaged.

The Santa Fe elevator was recognized as the best house in Chicago, barring only the Rialto Elevator and Armour "D," and it was about equal to the latter. It will probably be rebuilt.

### KHERSON OATS.

The so-called Kherson oat was brought from Russia by Prof. F. W. Taylor of the Nebraska Experiment Station in 1896 and has been tested exhaustively by that station as to its adaptability to the corn belt of the United States. It is a curious fact, probably not generally known, that while corn and oats grow side by side and follow each other on the lands of the corn belt, and while the corn states



KHERSON OATS.

are the largest producers of oats, nevertheless the corn states are not those in which the yield per acre is highest, or even high.

It was, then, Professor Taylor's aim to obtain a strain of oats that would approximately equal corn in productiveness in the same land. This he has apparently found in the Kherson oat, which, as careful tests in different parts of Nebraska in 1901 and 1903 indicate, is "peculiarly suited to Central and Western Nebraska on account of its habits of growth." (Nebraska Station Bulletin 82.)

This strain of oats is a vigorous but not a rank grower, having a short straw and broad leaves. The berries are light yellow in color, small, but numerous, and have a very thin hull. It usually weighs well and matures early. It does not do specially well, compared with other varieties, in Eastern Nebraska, but in the western part of the state it seems to do better than any other variety with the possible exception of the Texas red oat, which, indeed, it has outyielded on the station farm.

### VALUE OF A CLEANER.

Many receivers of grain, especially retailers in the East, often wonder what becomes of the large number of grain cleaners annually made and sold to grain men and farmers; the grain so seldom has, they say, the appearance of having been cleaned. Perhaps explanation might be made, but it may be said, nevertheless, that the cleaner is not always worked to the best advantage.

And apropos of this statement there is an apt illustration of its truth, coming from Baltimore. A lot of damp and garlicky Southern wheat came in, grading "rejected." It was really such poor stuff that no elevator quite wanted to take it in.

A sample of the lot was, however, sent to the

Agricultural Department at Washington, where it was cleaned and returned, the grain on its second arrival in Baltimore being dry, clean, plump and altogether desirable; so much so that Chief Inspector McDonald said he would have no hesitancy in grading the sample as No. 2 red, which is the highest quality of wheat known in that market. Accompanying the sample from the Agricultural Department was a lot of foreign matter which had been taken from the wheat. This included garlic, cockle and other weeds and substances which infest wheat fields, especially in portions of Maryland and the South. As "rejected," the sample sent to Washington would have brought in Baltimore about 70 cents a bushel, but after its Washington treatment it would readily have commanded 87½ cents a bushel, a difference of 17½ cents. There was some loss in drying, of course, but that could have been only a fraction of the 17½ cents gain in price of the cleaned and dried sample.

A full report of the treatment of the grain at Washington is not at hand, but it is understood that the department officials put the grain through a commercial drier and separator.

### ELEVATOR IN MEXICO

A modern grain elevator of 35,000 bushels' capacity, with grain drier, is to be erected on the Oaxaqueno estate of the Tabasco Plantation Company of the City of Mexico. It will be built of concrete and be equipped with drying and cleaning machinery. In Mexico the weevil is a pest which has been a serious impediment to the storage of grain; but this house will have a hot air weevil exterminator. Hot air will be forced through the corn or other grain, so that the weevil, usually lodged in the heart of the corn kernel, gets uncomfortably hot and makes for the open. No sooner does he get on the outside of the kernel than the stiff current of air sends him to the farther end, where he passes through an aperture and finds himself mixed up with many millions of his fellow kind. A fire receives additional fuel when the heap is flung into it.

The elevator will be equipped with a corn sheller also, which will deliver the grain by machinery to the drier, from which the grain is further handled by machinery until it is deposited in the concrete vaults, which are insect-proof.

The elevator will be used for storing grain for the plantation's men and animals.

### FINANCING A CROP.

The amount of grain received in Minneapolis in 1904 was 140,000,000 bushels, and the value (on the farm) about \$70,000,000. Whence comes the money needed to move this vast mass of produce, which is sent as grain or flour all over the world? You know that about 95 per cent of the payments of this whole country is made by checks or drafts. Here in the Northwest we have, in the registered elevator receipt, one more example of the power of commercial paper—the right to draw being regarded as equal to having the money in hand. So highly are these receipts valued that wheat paper is now nearly, if not quite, all "on demand," said G. M. P. Predham of St. Paul in a paper on wheat loans read at the annual meeting of the American Institute of Bank Clerks at Minneapolis.

For about two months before the crop movement begins, the grain business is quiet. During this time much money that would be idle in Minneapolis is kept in reserve in Chicago and New York at interest. About the middle of August the crops begin to move in Southern Minnesota, and thence the movement works upward through South and North Dakota. At the height of the season as many as 2,000 carloads will reach Minneapolis in one day. The value of a carload depends upon the kind of grain and grade. Besides such cash as can be spared in Minneapolis, currency is drawn from the East, to be shipped into the country named above. One large Minneapolis

bank alone will ship as much as \$150,000 in one day; so that the four largest banks of that city will easily send out among them half a million dollars in the same time. This sum would be much higher but that the power of the draft is of so much avail. Agents in the country buying grain will make large use of drafts on Minneapolis; and, as the country banks need plenty of money in that city to meet their own drafts, a great amount of cross-shipment of currency is avoided. The chief call for hard cash in the country is to pay the harvest hands; aside from that, the farmer can settle his accounts with checks or drafts.

In a few words, the easy and quick handling and financing of the Northwestern grain crop depends very largely upon the registered elevator receipts. These receipts are the product of the following factors:

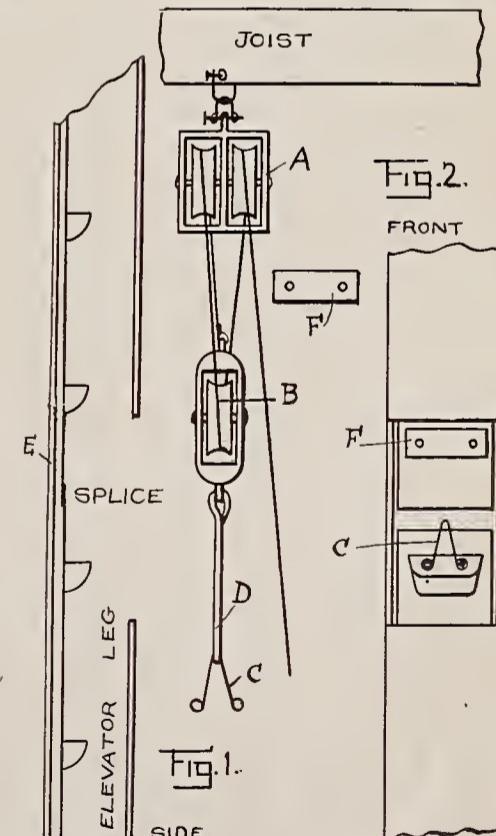
1. The threefold report of inspection, weighing and storage, by bonded men.
2. The weekly sworn statement of the elevator books, which must agree with those of the registrar.
3. The Chamber of Commerce rules for the management of elevators.
4. The high standards of membership in the Chamber.

And so it is that these receipts enjoy the name of thoroughly sound and elastic collateral, not only in Minnesota, but all over the East and in Canada.

### ELEVATOR BELT TIGHTENER.

The accompanying sketch shows an elevator belt tightener that has been used successfully for a number of years, by a flour miller. In Fig. 1, A represents a double tackle block; B, a single one; C, a piece of wire with a loop at either end and bent so as to fasten the loops on bolts in elevator; D, a piece of rope about two feet long connecting B and C; F, a block of wood with two holes in it, used to fasten elevator belt to back of leg. Fig. 2 shows elevator belt fastened to back of leg with F, and C fastened on bolts in elevator cups.

Fasten A to joist as shown. After passing rope



through A and B, as shown in Fig. 1, run elevator belt up to the second cup below splice. Fasten C to cup, as indicated in Fig. 2. Run elevator belt back until the splice comes to about the middle of opening in leg; fasten belt at E with F; then take belt apart and tighten with rope, fastening it to hold belt while you put it back together. Cut off belt, make the splice, take F and C off and elevator is ready to run.

This tightener can be used in any place by one man.

### ATTACKS THE INDIANA RAILROAD COMMISSION.

Mr. Henry E. Agar, formerly a member of the Indiana legislature from, and now a grain shipper in Gibson County, next door to Posey, on the Wabash, has begun an attack on the new Indiana Railroad Commission. Pluming himself on being the one man who "stood alone in my opposition to the measure" and having voted "no," Mr. Agar is circularizing the state in opposition to the law which he says is doing what he predicted, to wit:

That it would cripple the large interests at the expense of the small dealer and ruin the business of the extensive grain and lumber dealers. It will work more hardship on the farmer and producer, on the manufacturer and the big dealer, than any act of any assembly in the past decade. All because a few inland towns were paying excessive rates on a few carloads of stuff.

It will effectually kill towns on the borders of the state, like New Albany, where all the produce and commodities will have to be shipped to Louisville and hauled back, and business will be crippled all through the state; because of the interference of the Railroad Commission the railroads will raise their rates on the big handlers to meet the price paid by the scoop-shovel operators, and not lower the rates. There would be just as much sense in asking the sugar refinery to sell you a pound of sugar at the same price as a carload as to ask a railroad to haul one carload as cheap as he could a hundred carloads.

Instead of putting the small dealer on the same plane as the larger operator, it compels the railroad company to place the large operator on the same footing as the small scoop-shovel operator. So a man with a \$50,000 plant has no advantage over the man owning a scoop shovel and renting a pair of scales, if in the grain business, although the large dealer handles a hundred cars, pays larger taxes, insurance, and employs many men. In this encouraging investment?

If all the opposition to the Indiana law is based on this sort of argument, it is entirely safe; since it is evident that if Mr. Agar ever did know public opinion on the transportation question it was that of a past generation. He should get up to date.

### THE DULUTH-SUPERIOR FIGHT.

The Minnesota inspection department has developed a plan for inspecting grain in and out of Superior without coming into contact with Wisconsin law, which is none other than to stop incoming grain in cars at Sandstone and Cass Lake for inspection and to pass upon steamer grain on the boats at Superior. In accordance with this plan, samples were sent to both Sandstone and Cass Lake to begin work on September 7. The men will take samples of the grain in each arriving car, which will be inspected in a room in the Duluth Board of Trade building, prepared for that purpose.

The fight against Superior has been vigorous and will be directed to effect results. For aside from the coup above noted, the N. P. Railroad has adopted a scheme to embarrass Superior, by requiring that all grain hereafter shipped to Superior, for which Wisconsin inspection is asked, shall have the notice of Wisconsin inspection placed on the bill of lading, lack of which will throw the grain to the Minnesota inspectors; and by providing grain to Superior for Wisconsin inspection shall be charged \$1.50 extra for switching charges.

For the other side, the war has been carried to Washington, State Senator Geo. M. Young of North Dakota having called Attorney-General Moody's attention to the fact that cars of grain consigned from North Dakota to Superior have been held up at Duluth and given Minnesota inspection without their being ordered for Minnesota inspection. The consignees of the grain are Superior commission men, and have been given no official information as to the whereabouts of their grain, although it was billed here. Senator Young says he thinks this is in violation of the provisions of the interstate commerce act, being an interference with the rights of shippers, and he asks that

if the Attorney-General finds such is the case he proceed in the matter.

Meantime the Wisconsin Commission has been acting in a dignified manner, letting the Minnesota inspectors do pretty much as they pleased—bidding their time, perhaps, for decisive action of some sort not now disclosed to the public.

### M. E. COOKE.

A list of a half dozen of Chicago's grain commission firms who have been continuously in business for the longest period must include the name of M. E. Cooke.

Mr. Cooke gained his initial experience in the grain business in Kankakee County, Illinois, and in 1888 entered the grain business in Chicago as a solicitor for Charles Counselman. He was their first representative in the country, and for them he made the first postal card track bids ever sent out of Chicago. He became a member of the Chicago Board of Trade in 1890 and went into the commission business on his own account in 1892, with offices at 85-86 Board of Trade Building.

His is a familiar and well-known figure around



M. E. COOKE, CHICAGO.

the cash grain tables on change, and letters he has received from shippers from time to time indicate that he has the true salesman's ability to look after grain consigned to his care so as to secure for his customers some of the best prices obtainable on day of arrival of cars. He is a firm believer in track sales for the benefit of shippers generally, but while he makes daily bids he solicits and is in position to handle business advantageously on commission.

His one hobby outside of his business, which is always first, is automobiling, as shippers can testify who have happened into his office when his "auto" was handy. He is credited with having opened the first automobile store in Chicago and to have brought to the city the first gasoline motor car ever used in the western metropolis.

### EMBARGO RAISED.

The state of Georgia by direction of the legislature has raised the quarantine, or embargo, put on Texas oats shipments into that state. The quarantine put upon Texas oats with a view to preventing possible transfer of cotton boll weevil in oats to Georgia has been in operation for at least a year, in spite of continuous effort on the part of the Texans to have it removed, and has, of course, narrowed the market for Texas oats.

Early in August the Texas Grain Dealers' Association sent a committee to Atlanta to present the matter to the legislature, then in session, and then

they found for the first time that the embargo was not an emergency police regulation, but was created by statute which could not be set aside save by legislative repeal. The Texas dealers then asked the governor to submit in his message the question whether the law might not be repealed. The boards of trade at Atlanta, Augusta, Macon, Columbus, Brunswick and other important Georgia cities had from time to time passed resolutions memorializing the legislature to give the relief sought, but it appears there has been a very embittered opposition from the rural sections where the scare of the boll weevil refuses to down even in the face of a self-apparent guarantee of protection. Finally the bill to repeal the obnoxious statute was passed and on August 22 was signed by the governor and became a law.

### RECONSIGNMENT LEGAL IN WISCONSIN.

The Wisconsin Railroad Commission has made a ruling permitting the reconsignment of freight in transit in that state. The early interpretations of the new state railroad law were to the effect that the roads could not legally reconsign any freight on the original billing and forward the same to the final destination at the through rate which would have been made had the freight in question not been stopped in transit and later forwarded. This ruling worked a great hardship upon all shippers and receivers of grain in Wisconsin, who for many years have been accustomed to reconsign grain billed to a particular market point and then forwarded to another market on the same through rate that originally was made on the consignment, and a prohibition of this privilege would disorganize the habits of the trade. As the new law was thought to make this illegal it was at once stopped, to the injury of grain dealers everywhere.

On a rehearing of the subject, however, the commission made a special ruling to the effect that such reconsignment can be made by the roads, without violating the law, and the freight officials of the state roads have instructed their representative that in the future all such shipments may be forwarded at the through rates as in the past.

### PUTS AND CALLS AT CHICAGO.

The Chicago Board of Trade by a vote of the members on August 30 voted 503 to 260 to repeal the rule which provides for the expulsion of members dealing in puts and calls in Chicago. The vote was a surprise to those who opposed the repeal, since the rule simply put into force a prohibition of a form of trading which is made a criminal offense by Illinois law.

Nevertheless, there has been no trading in privileges in Chicago, the members of the Board, including the radicals in favor of reserving privilege trading, recognizing the fact that the Board would put itself in a very queer position by authorizing a form of trading specially and particularly penalized by the statutes. However, a meeting of members was held on September 1 to consider the situation. This meeting was presided over by Walter Fitch, who appointed a committee, consisting of J. A. Patten, W. S. Crosby, H. B. Slaughter, D. J. Murphy and William Nash, to look into the legal status of the matter, it being understood that no trading on privileges would take place for the present, at least.

Meantime, all this class of business is going to Milwaukee, where it is entirely legal.

The Illinois Central has adjusted the claims of shippers for losses in the fire of the docks at New Orleans last winter, and has paid \$800,000. In addition to this the road lost \$2,500,000 worth of property, making its total losses \$3,300,000. The Illinois Central carries its own insurance, so that the entire loss falls on the company.

### FRICITION AT KANSAS CITY.

The Kansas City Board of Trade and the Missouri Board of Railroad and Warehouse Commissioners have locked horns on the matter of control of the weighing of grain in the local elevators on the Missouri side. Hitherto the Commissioners have had but three weighmasters of their own in Kansas City, operating in three elevators bonded to the state; but recently they decided to assume control of the weighing in all elevators and warehouses, both public and private, at the state terminals, beginning with the appointment and installation of weighmen at Kansas City.

The Kansas City Board of Trade, a few years ago, under pressure from the Kansas Grain Dealers' Association, established a weighing bureau which has been giving pretty general satisfaction to shippers, and it is believed that even should a state system be established, this bureau would still have to be maintained and, of course, paid for by the grain. As Kansas City charges aggregate rather more than the expense of handling grain at most other grain markets of the West, the additional charges the state weigher would exact is not contemplated with equanimity by either shippers or receivers.

President Goffe of the Board of Trade, speaking of the order putting state weighers into the elevators on September 1, said to a reporter:

We will not submit to it unless we have to. The Kansas City grain market is already burdened almost beyond its strength, and we consider this latest move of the state board as nothing less than an imposition and an effort to force us to support a corps of political henchmen for whatever party happens to be in power. To defeat the proposition we will carry the matter into the United States courts and up to the highest tribunals in the land, for we believe such action is unconstitutional, because it interferes with interstate commerce. The grain which comes into the Kansas City market is nearly all Kansas, Nebraska, Oklahoma and Indian Territory cereals. So little Missouri grain comes here that it is hardly a drop in the bucket. Now, we do not believe the state weighmasters have a right to handle this when it comes from another state and is handled by private parties.

The Board of Trade's weighing department is as efficient as any in the country. It was established several years ago and under the direction of J. G. Goodwin has made an enviable record for itself. Not once has there been a suspicion that it was not all a correctly managed weighing department should be. There have, of course, been a few difficulties arising out of cars not being properly coopered, and a slight loss of grain thus resulted, but in each instance the weighing department of this Board has established the correctness of its figures. The dual system means an added tax on the grain of from 65 to 75 cents and will add nothing to it. We believe we have a clear case and good grounds for action if the commissioners persist in their efforts to force their weighmasters on us.

On September 2, nevertheless, state weighers were put into the private elevators of Kansas City in spite of the protests of the owners. All of these but one had on September 1, when the Commissioners undertook to begin operations, denied admission to the new men, but were threatened with arrest if they continued such obstruction.

The Attorney-General of the state holds that the state law requires the state inspection bureau to also weigh the grain, while the owners of private houses contend that the persistence of the commission is a violation of interstate commerce law, etc.

However, on September 2, at a conference by Herbert S. Hadley, attorney-general, and John H. Lucas, acting attorney for the Board of Trade, it was agreed that if the elevator owners would permit the weighers to perform the duty required of them, the issue as to whether the state law required the weighing of grain in private elevators would be settled by a friendly suit, to make which John McEvans, owner of the Acme Mill, agreed to submit to arrest on the technical charge of resisting the law. The case will probably be heard at the October term of the Supreme Court.

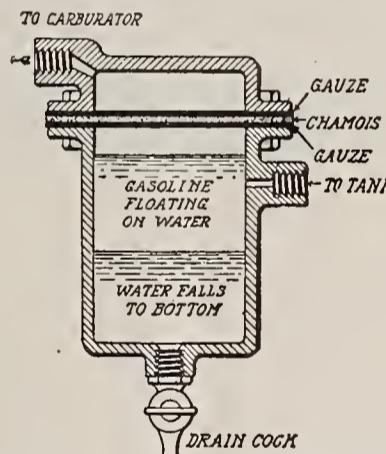
Meantime the commission men are sending out

circulars to their shippers, explaining why an extra charge of 50 cents per car is made, and suggesting that the shipper, if he does not like to throw away this 50 cents per car, sign a protest, which is also inclosed, in order that later on there may be a war made upon the duplicate weighing of the Missouri Inspection Department as unnecessary.

"This is all a fight to save the bug under the chip," said a state official. "Every certificate issued by a board of trade weighmaster is docked 100 pounds 'sweepage.' The Missouri state weighing certificates will not be allowed to be tampered with. A Missouri or a Kansas farmer will get the actual weight of his car on arrival at the elevator, including the 100 pounds. Kansas last spring passed a law expressly forbidding this 100 pounds 'sweepage,' and Speaker Stubbs estimated that it meant a saving of \$50,000 to the Kansas farmer. There were 4,479 cars of grain sent to the Missouri elevators during the month of August. This means no less than 7,500 bushels of wheat sneaked out by this 100-pound 'sweepage' trick. The excuse is that there are 100 pounds of grain left in a car when it is unloaded. As a matter of fact there is not a gallon measure left in a car. The elevator men, by having their own weighers and making out their own certificates, keep down all excitement over this 100-pound 'sweepage,' which in the year runs into big figures. The Missouri Board of Railroad Commissioners issued an order some months ago forbidding the 'sweepage' business, and the St. Louis elevators have stopped the practice. Kansas City elevators, however, have kept it up. The inauguration of state weighing will terminate it, I think."

### SEPARATING WATER FROM GASOLINE.

Anyone who has operated a gasoline engine to any extent will probably be familiar with the annoyance caused by water in the gasoline supply.



This will put an engine out of business quicker than almost any other cause.

The Motor Age, in the accompanying illustration, presents an arrangement which is claimed to effectually eliminate this difficulty. It consists of a chamois-skin pocket to be carried by a wire gauze on either side and placed between the gasoline tank and the carburetter.

The arrangement should be on the order of the device shown in the cut, so that the water may settle into a separator, and be drained off. The separator should be about 4 inches long and 2 inches in diameter. If this is drained each day no water will reach the carburetter unless the chamber becomes filled, which could only be occasioned by rain entering the fuel tanks, as the gasoline itself of a day's usage would not contain that quantity.

The strainer placed between the tank and the carburetter is better than one placed at the tank, for the reason that in the latter dirt and water would be forced through the tank strainers by the impact and weight of the fuel entering, while in a strainer placed between the tank and the carburetter the fuel is strained slowly, in fact, as slowly as it is used.

### HOLDING WHEAT IN ENGLAND.

While the majority of the British Commission on Food Supply in Time of War did not in their report recommend the much-discussed project of holding large stocks of grain in store at public expense, nevertheless a minority of the Commission did substantially indorse such a scheme, by submitting a qualified approval of a scheme proposed by Mr. Marshall Stevens for encouraging the storage of wheat in Great Britain.

Mr. Stevens is manager of the Trafford Park Estates Company of Manchester, operators of the Manchester grain elevators, and his proposal is to erect a fireproof grain elevator alongside the Manchester Ship Canal, which shall have a capacity of any size (not less than 4,000,000 bushels) named by the government, the latter to pay the company 1 1/4 cents per bushel per annum upon the storage capacity for the whole period during which it might be provided, or 1 1/2 cents per bushel per annum if the period of government payment should be limited to twenty years, with a reduction for the twenty-first and the following years if the government wished to continue the arrangements.

An expenditure of about \$60,000 a year would thus provide during twenty years storage for 4,000,000 bushels of grain, and so on in proportion for any amount of grain that might be required by the government. The storage house would be equipped at the cost and risk of the Estates Company, with an operating elevator for receiving grain from steamers or from rail and for giving delivery to rail, cart, steamer or barge, and provision would be made for the grading of the grain. A drying plant, so as to render English as well as foreign grain fit for storage, would be provided, and the whole storage accommodation would be available for the storage of imported and English grain, free of any charge for rent to the user. It was part of Mr. Stevens' proposal that if the government accepted his scheme it should offer the same terms that his company were prepared to accept to all owners of existing public grain elevators in the country.

Mr. Stevens argued that the scheme would be of advantage to grain shippers, because they could send their grain to a certain market to be stored without cost until used, and which could be transferred by negotiable warehouse receipts; millers could buy wheat and let it lie in store free of cost; the drier would greatly improve the general quality of all British and most foreign wheats sold in Great Britain; while the handling of the grain at Manchester would be less expensive by at least 5/8 cent per bushel than at other ports where the grain has to be handled on lighters.

The signatories of the minority report came to the conclusion that a system of free storage, based on the lines indicated, would be adequate, with regard to some, or a considerable portion, of the grain, at all events, and they give the following reasons:

1. Competition in the corn trade is notoriously very keen; profits are cut very fine.
2. The cost of storage in the United States, irrespective of interest, i. e., the rent for storage only, as computed by competent authorities, is at the rate of 9 cents per bushel per annum.
3. The charge for rent and storage would be avoided altogether under the proposals for free storage, and delivery ex elevator would be same as delivery ex ship, to which so many witnesses have attached importance.
4. Much of the grain in question must in any case find its market sooner or later in the United Kingdom; and the temptation of free storage could hardly fail, in view of the opinions we have quoted as to the keenness of competition, to offer a substantial inducement to send it sooner rather than later to this country.

They are satisfied that it would be an effective means of increasing British existing stocks of wheat and flour, which are so "seriously deficient" at the present time, and that increase, they consider, should not be less than six months' consumption, in addition to the lowest stocks which it is computed that Great Britain has at present. They add that Manchester, with its perfect security

from the operations of a hostile fleet, situated as it is 40 miles inland, and at the same time with access by water for the largest steamers to the elevator's side, offers peculiar advantages either for experiment or as one of the permanent centers for storage and distribution in the midst of densely populated district.

### DURUM IN MINNESOTA.

Shippers of durum (macaroni) wheat from the Dakotas are complaining of the discount at which this kind of wheat is selling. Up to about September 1 about a quarter of a million bushels had been bought at Duluth "to arrive," and presumably the grain will be exported, says the Commercial Record, as millers, in the East at least, don't seem to care for it, and the discount is 15 to 16 cents from No. 1 Northern.

The Western farmers, formulating their complaints of the treatment of durum by buyers, cite a bulletin of the Brookings station on this subject, to the effect that durum flour makes excellent bread, and that, "As a rule the products from macaroni wheat are richer in protein or muscle building materials than any of the bread wheats."

All of which is probably true, but there are fashions in bread as in other things, and as durum flour makes a dark bread, it is just now out of favor. "So as regards price," says the Record, "68 to 69 cents is probably out to the limit, as No. 2 hard Kansas, shipped out via the Gulf ports, is costing the foreign miller no more than the No. 2 durum shipped out via the Northern ports, is costing. Further than that, the number of foreign mills that will use it is, as is the case in this country, limited in number and their requirements may be filled any day. It is understood that Minneapolis mills have practically ceased buying it."

### WHEAT IN MEXICO.

Some fifteen or eighteen years ago the late David A. Wells, in writing of Mexico, based his hopes of a future for the land on the fact that in the peons' cottages one might even then frequently see a lamp burning kerosene. When days become so short for a peon that he must needs lengthen them with artificial light, there is no limit to his progress. By the same token, one might in this later day establish the accuracy of Mr. Wells' foresight by a study of the development of wheat growing in Mexico. Wheat is essentially the prosperous man's cereal food. For a century it has been entirely practicable to measure the relative prosperity of the world's working people by the proportion of wheat to rye flour eaten by them. American and English workingmen have never "taken to" black (rye) bread; the French have eaten much less of it than the Germans, and that wheat flour bread is annually coming into greater consumption in Germany is the best evidence of the increasing material prosperity of the working classes of that empire.

So in Mexico, evidence of the increasing betterment of the working classes, who hitherto have fed on cornmeal and beans, frijoles eaten on tortillas, or corn "flap-jack," is seen in the rapid increase of the wheat crop in recent years, which is the most notable phenomenon of Mexican agriculture. While the price of wheat and wheat flour has increased, nevertheless the creation of a permanent class of artisans in the cities of the new Old Mexico has been sufficient to absorb the increased production of wheat, working people's wages warranting and creating a standard of living in which wheaten bread is a permanent factor. So this middle class, because it suits their taste and their purse, and even many of the poorer class, because white bread in a measure reflects a certain social standing, real or assumed, "will flock to the bakeries to buy white bread at prices altogether unreasonable, for flour is, though bad, outrageously dear. American roller mill machin-

ery has been introduced, and the grade of flour is being improved slowly, as is the quality of the wheat crop raised. The demand outruns the supply, however," says Consul Le Roy, writing from the state of Durango, "at least in this section of Mexico, and the pressure of good prices is driving all the ranch owners to plant more and more wheat each year. Old wheat has been selling of late in Mexico City for \$15 Mexican per cargo of 161 kilograms (about \$1.25 in United States currency per bushel of 60 pounds), and a month earlier it was selling for nearly 20 per cent higher. The raiser can safely count on \$1 gold per bushel for his wheat.

"It is believed by some that spring wheat can be raised in Mexico without irrigation. All the wheat now raised on the arid plateau is winter wheat, and must be watered by artificial means. It has been suggested in various circles of late that by deep plowing shortly in advance of the rainy season the land of this plateau would retain a very much larger proportion of the water that now so speedily seeps through it during the rainy months, and that spring wheat could be successfully raised within ninety days, if planted at the proper time. This would increase the size of the crop immediately and also lead to improvements in methods of irrigation. Paul Hoffman, a German agricultural expert, who has been engaged of late by the Mexican Government for the purpose of introducing better kinds of fruit, is a believer, for one, in this experiment with spring wheat on the plateau."

### INTERNATIONAL WATERWAYS COMMISSION.

The members of the International Waterways Commission spent some time in the eastern portions of Canada during the early part of July; but after interviews at Ottawa with the premier, the minister of marine, and other members of the government, collecting information, the Commission adjourned until September, when joint sittings were held at Buffalo, N. Y., Niagara Falls, Toronto and Hamilton, Ont.

The Commission consists of six members and two secretaries, three members and a secretary being appointed by Canada and a similar number by the United States. By agreement the duties of the commissioners are limited to an investigation into the condition of the international waterways discharging into the ocean through the St. Lawrence River. The commissioners meet either jointly or separately as occasion may require.

The Canadian commissioners are J. P. Mabee, K. C., Toronto (chairman); W. F. King, dominion astronomer, and L. Coste, C. E., and the United States commissioners, Colonel Ernest, Washington (chairman); G. Clinton, Buffalo, N. Y., and G. Y. Wiseman, Detroit, Mich.

### GRAIN REGISTRAR.

Charles W. Andrews has been appointed registrar of the state grain office and assumed his duties on September 1, succeeding A. J. Lovejoy, "resigned." The office is worth \$2,000 per annum.

Mr. Andrews has been Republican county committeeman from the Twenty-third Ward of the city of Chicago. He has lived all his life on the North Side, and for years has been in politics in that section. He was deputy state treasurer under Fred A. Busse, and was deputy county treasurer all of 1905 until appointed to the present office. He is in the livery business at 116 Lincoln Avenue. His home is at 124 Lincoln avenue.

Buffalo is suffering from a grain blockade that is getting to be serious. The elevators are glutted and the car situation for shipments east has been steadily growing worse. The Erie Canal is getting more business, but owing to its general physical condition and that of the boats it is not able to relieve the situation much at present.

### NEW HAY WAREHOUSES AT CHICAGO.

That Chicago is at last to have warehouse facilities for handling its receipts of hay in keeping with the importance of the Chicago hay market seems now but a matter of working out the details and making the final arrangements. The Chicago hay receivers have for a long time felt the need of such a structure, and for several years they have hoped to induce the railroads to build the warehouses or be able to incorporate a company and construct one or more with the co-operation of the various receiving roads. A big step in the accomplishment of this purpose was seen the latter part of August in the incorporation at Springfield, Ill., of the Chicago Hay Warehouse Co. with H. H. Freeman, George S. Bridge and C. F. Van Wie, three of the best-known hay receivers, named as incorporators.

The company is incorporated for \$50,000, which has already been subscribed by the Chicago hay receivers.

A site has not yet been decided upon, but it is anticipated this problem will have been settled before the end of the present month.

Probably three or four sheds will eventually be built on as many of the principal receiving roads at some distance from the central portion of the city. The city being so large, a great amount of territory must be covered by teams in the North, West and South divisions, and a single large, central warehouse would have its drawbacks even if property values in a central location were not so high. A large warehouse for the entire city would mean much longer hauls for a large number of the teams in daily service in hauling hay.

### RATE REDUCTION IN THE NORTHWEST.

The Great Northern Railroad, following a lead forced upon the Canadian grain carriers from the West by the Dominion authorities, has made material reductions in the rates from points on that line to Duluth and Minneapolis. The reductions range from  $\frac{1}{2}$  cent from nearby points in Minnesota to 2 cents from distant points in North Dakota.

In view of the big crop in the Northwest the reduction will amount to a large sum, and as a mark of appreciation thereof Governor Sarles of North Dakota, on August 23, made a special visit to St. Paul to personally thank President J. J. Hill on behalf of the people of North Dakota for taking the initiative; for of course after the Great Northern led off, the Northern Pacific and Soo lines followed. "Mr. Hill," said Governor Sarles, "has consistently followed out the policy he avowed from the start, that the volume of business done by his road would govern the freight rates. From the beginning, when rates were 25 cents per hundred, he has lowered the rates until now they are 12 cents, or just one-half lower than they originally were. While the benefit to the individual farmer may be small, in the aggregate the whole state of North Dakota will be immensely benefited."

The Canadian Railway Commissioners at Ottawa issued an order on August 10 which requires the Grand Trunk and Canadian Pacific railways to make a general reduction in rates from Ontario points to Montreal on grain and grain products for export. The action has been taken as the result of a complaint of the Dominion Millers' Association, supported by the Canadian Manufacturers' Association. The reductions from Ontario bring the charges more into line with the percentage groups in the United States. In addition the board has ordered that the grain rates from Ontario to Montreal for export must be on the same basis as from the Western states to Montreal, viz., the Philadelphia basis, the New York basis still applying to Portland and St. John.

**SCOTCH BARLEY TRADE.**

The Scotch barley trade is in the doldrums on account of the depression in the whisky trade, the consumption of which has suffered a serious decline. This fact, coupled with a large increase in the barley acreage this season, makes the outlook rather serious.

The situation is the outcome of a period of lively speculation in Scotch whisky, the consumption of which only a few years ago began to increase by leaps and bounds. The price rose rapidly as the blenders found the supply under their demands. Whisky in Scotland must be held in bond until aged whether by the distillers or merchants; and thus the element of pure speculation came in, when Highland distillers doubled and trebled the capacity of the existing plants, while new distilleries were rushed up on every hand. In the comparatively short period between 1892 and 1899 the number of distilleries in Scotland had increased from 130 to 161. The inevitable collapse came toward the end of 1898, a great Leith blending house suspending payment without the slightest warning. Others followed in quick succession, and soon the trade was flooded with whisky thrown on the market for realization. Since then production has been slowly but steadily curtailed, the output for 1904 having been but 27,110,000 gallons compared with 35,769,000 gallons in 1899. Still stocks have accumulated, and more curtailment is necessary, the stock on hand about January 1 last being about 121,400,000 gallons, or four to five years' consumption. And by now, therefore, it is "up to" the barley men, who will have to look elsewhere than to the distillers for a market for the grain.

**AN ARABIAN GRANARY.**

An ingenious contrivance for storing grain is in use among the Arabs, says Bulletin No. 80, Bureau of Plant Industry, United States Department of Agriculture. A piece of high ground having been selected, a hole ten to eighteen feet deep and six to ten feet wide is dug, with a narrowed opening. The interior is thoroughly dried by burning in it straw or brush, and is then lined with a layer of matting and straw about six inches deep. The carefully dried grain is packed closely into this cellar, the mouth of which is then covered with straw matting, and finally with clay. Earth is then shoveled over the top to hide the whereabouts of the store. Grain can be kept for long periods without deterioration in this unique sort of granary. The Kabyles generally use earthenware jars for storing grain.

Secretary of Agriculture Wilson should draft B. Frank Howard of the Chicago Daily Bulletin as statistician for the agricultural bureau. He could reorganize, remove the dead timber and put the bureau on an up-to-date basis and give the business public the desired results. He is above suspicion and recognized as the best crop statistician. Make the salary attractive, as was necessary with the Panama Canal officials.—C. A. King & Co., Toledo.

"The elevator companies are all talking about the large movement of spring wheat as they did a month ago of the winter crop, but they won't sell or offer any cash wheat for any delivery, as the millers in the Northwest are after the first cash wheat offered them, as they were in the Southwest and West when the big movement was all absorbed by interior millers without any reaching the seaboard for exporters," said the New York Commercial of August 22, quoting a New York grain broker; "so it is likely to be with the spring, and the elevator companies are competing with the millers for the spring wheat, as they have been for the winter, and are not selling cash wheat this year until they get it, after having been caught so badly the past year in doing so. They are learning that the day is passed when they can fix the price for the farmers' crops, and they confine their short selling to depress the market to the wheat pit, where they

can ring out their trades or switch them over to later months when they get on the wrong side, or bluff the longs out of their speculative holdings so they can cover. But they can't bluff the farmer out of his holdings any more, and they have become tired of working for him any longer as they did last year on both wheat and corn. This is why the offerings of cash wheat and corn are so small that exporters can't fill their orders."

**H. T. McClure.**

A young man, well known to the Chicago hay trade through personal contact, and to the shipping trade throughout Illinois and adjacent states by his favorable sales on the Chicago market, is H. T. McClure, manager of the Chicago office of W. J. Armstrong Company of Milwaukee, Wis., receivers and shippers of hay and grain.

The W. J. Armstrong Company became established in business at Milwaukee in 1892 and incorporated in 1899. Their business has grown steadily as the logical result of capable, personal



H. T. McClure, CHICAGO.

attention to the business entrusted to their care. They have made a specialty of hay; and early in the present year, realizing the advantages of an office in Chicago under the charge of an enterprising, competent man, selected H. T. McClure, secured an office at 341 Postal Telegraph Building for his headquarters and told him to do business. Results so far, at the close of the first half year, indicate that he has done all or more than was expected of him.

Mr. McClure is a native-born Chicagoan, thirty years old and gifted with the Chicago spirit of business. He is acquainted with all branches of the business, having been actively engaged in it with several of the city's best established commission firms as bookkeeper, solicitor and salesman since 1897. It is this threefold experience, combined with a desire to do his best, which is enabling him to win his way and will tend to make the Chicago branch of the W. J. Armstrong Company a permanent and strong feature of that Company's business.

Under pressure of the new Indiana Railroad Commission, the Pan Handle and L. E. & W. roads, which in past years refused to accept grain from each other, have agreed to a free interchange, charging the regular switching rates.

Maryland is the first to come forward with a big ear of corn. It was grown in Talbot County and measures 16 inches in length, contains 16 rows around the cob, with 75 grains of corn on each row, making a total of 1,200 grains to the ear.

**FACTS AND FIGURES**

Fort Worth, Texas, has 13 wholesale grain firms.

Texas dealers believe that most of the 1905 oats of that state have left the farms.

Houston, Texas, received her first car of new rice on August 26 from Clodine. It graded No. 1 Honduras.

Many people figure repairs and replaced machinery as increase of valuation instead of replacing depreciation.—McCotter.

Even the rusted and shriveled seed wheat planted last spring has produced big crops in the Northwest this season, where "everything goes." Such luck!

Mr. John B. Daish, general counsel of the National Hay Association, has removed his law offices to Kellogg Building, 1416 F Street, Northwest, Washington, D. C.

St. Louis May allows hard wheat at discount. All trades in wheat in St. Louis, beyond December, allow No. 2 hard wheat to be delivered upon contracts at a discount of three cents.

Mexican bean growers at Fowler, Colo., have agreed upon 3 cents per pound as their selling price. The crop of the valley will not exceed 40 cars, against 80 to 90 as expected.

The bureau of plant industry of the Department of Agriculture has employed E. M. Freeman of the University of Minnesota to devote his entire time to the study of rusts of the cereal crops and grasses.

The steamer Huelver was chartered August 16 to sail from Baltimore in September with a full cargo of grain, being the first ship in eighteen months chartered at that port entirely for grain.

That Indian corn cannot be successfully grown in eastern Washington and Oregon is a theory rapidly being exploded by frequent tentative plantings which almost invariably result in profitable, not to say large, yields.

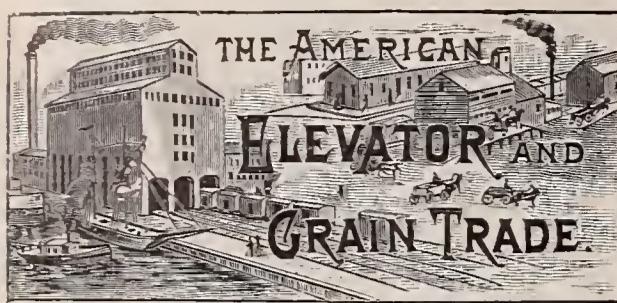
Galveston handled no grain for export in August. For the year ended August 31, 1905, the port exported 32,000 bushels of wheat and 5,606,117 bushels of corn, against 11,170,654 bushels of wheat and 3,406,377 bushels of corn for the previous crop year.

The Agricultural Department has been sounding trade opinion on the matter of the hour for publishing the monthly crop report. It is said that the bulk of the answers received continue to be strongly in favor of the noon hour of publication. No announcement will be made as to the nature of the letters or the suggestions they contain until all the replies are in.

It having been reported to the Manitoba Provincial Department of Agriculture that milling and elevator companies are continuing the practice of selling grain screenings for feed purposes, official warnings are being issued to all companies to the effect that unless the practice be discontinued forthwith, the provisions of the Noxious Weed Act will be enforced vigorously.

On August 19 a farmer of Carroll County, Georgia, "shipped a whole car of corn off to market. This," the local chronicle says, "was the first carload of corn raised and shipped by one farmer alone in Carroll County. It is said that corn enough remains in Carroll County yet to supply the whole county for another year, of last year's crop, and prospects were never better for an abundant crop than they are now."

Henry Kitchel of Kansas City, Mo., has begun suit against the J. Rosenbaum Grain Company for \$10,000 damages. His petition relates that his son, Harry Kitchel, was employed in the company's grain elevator, where there was a great deal of dust; that he was compelled often to go across certain railroad tracks to get a drink of water; and that while making one of these trips he was caught between the bumpers of cars and so badly crushed that he died from the injuries.



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#### ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

#### CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., SEPTEMBER 15, 1905.

Official Paper of the Illinois Grain Dealers' Association.

#### SHORTAGES STILL COMING.

It is assumed that the first mission of the trade journal is to instruct and not simply to interest. Let it be granted. But the experience of most trade journalists is that a large number of their readers refuse to be instructed, or, at least, to assimilate the instruction.

Take this matter of shortages. In practically all first-class markets at this day, sloppy weighing and certainly all deliberate stealing has been eliminated; and the grain that arrives is all credited to the owner. But all the grain that is shipped does not always arrive. There are various reasons, many of which will suggest themselves to the experienced shipper. Without going into statistical details, it is within the bounds of safety to say that the major part of the losses is due to the shipper himself; some are imaginary, because the shipper has no means of knowing accurately the amount shipped; some are fictitious, because the car is billed in excess of the truth; but mainly the loss is through the use of bad cars and defective coopering. All this last has been so often dwelt upon that the subject is trite beyond measure: nevertheless, Mr. Kress's experience at Toledo and the records of public weighing departments daily continue to show an amazing number of cars coming in leaking, where the proper care in loading would have made leaks impossible or, at least, improbable, except through gross carelessness on the part of the carriers.

Now, if dealers who have had their attention called to these things times without number will not heed—will not exercise due care to protect their own property—it is discouraging for trade journals to fill space with "instruc-

tion" that is without effect. One might occasionally devote it to accounts of Tom Worrall's repentance, or something else equally interesting, if not edifying.

#### STATE WEIGHING IN MISSOURI.

One can but sympathize with the trade in Missouri markets, where the Railroad Commission has set out to enforce a law providing for the weighing of grain at terminal elevators, under the supervision of the Commission and by its employes, necessitating an extra charge of 50 cents per car to be taxed to the grain.

But while the Kansas City Board of Trade has the sympathy of the trade in its fight against the state crowd, it would greatly strengthen its cause by an immediate abolition of the tare of 100 pounds per car of grain given gratis by the rules to the elevators. A "sweepage" toll that if reasonable in amount is fair enough; but the amount taken at Kansas City is about the highest limit taken anywhere; and it is, moreover, contrary to the laws of both Missouri and Kansas. The Board ought therefore to try and go into court with its case unprejudiced by a practice condemned by the laws of the states from which the bulk of its receipts come.

#### COST OF OPERATION.

Geo. A. Stibbens of Prescott, Iowa, kindly submits on page 133 a tentative statement of the cost of operating a country elevator. The statement is provisional only; but it will, we trust, serve as a basis for further discussion by others on the same topic.

We are inclined to think Mr. Stibbens is under rather than above the mark as to expense and above it as to direct profits. For example, here is the balance sheet of a Minnesota co-operative concern doing a business of 110,600 bushels of grain. The gross profits were \$2,087; expenditures, \$1,755.67, leaving a net profit of \$331.36. The expense of operation is given as follows, omitting payments of directors' and auditor's fees and a small past due dividend:

Salary of inspector and assistants.....	\$1,080.00
Insurance .....	127.50
Repairs and supplies.....	70.78
Gasoline .....	60.72
Interest and exchange.....	88.60
Telephone tolls .....	35.44
Taxes .....	39.00
Ground rent and license.....	11.00
Books and printing.....	30.85
Fuel .....	11.14
Unpaid bills .....	131.00

This statement excludes some items Mr. Stibbens rightfully charges, but properly includes a number he does not. Do the two statements contain all items of expense and the correct amounts?

In view of the narrow margins on which grain is usually handled, the expense account is vital. No matter what the income is, this account is the measure of profit. Can it be cut down or ought the margins to be increased? Is a 2-cent margin, the average dealer's gross profit, enough to cover the unavoidable expenses of the business and pay the grain buyer a salary as well as the profit he is entitled to as a factor in the movement of grain from the grower to the consumer?

There is no practical question of more importance than the cost of handling grain and its relation to the income from the grain handled. Sometimes the margin of profit entirely disappears. Where does it go to? Is it lost in the cost of physically handling the grain through the house or by shrinkage, in transit, by missing grades, or elsewhere, or in "bucking a neighbor" under the vague impression that somehow, while consciously paying more for grain than it is worth, the dealer may still make a profit on the deal?

The editor would be glad to have elevator men study these exhibits, comment upon them and send us similar data for publication. They will be published under the seal of confidence when so desired. Offer your figures, especially if business has not been satisfactory. Such data can hardly fail to be productive of good all around.

#### IMPROVING THE QUALITY OF HAY.

In a paper on "How to Dispose of Low-Grade Hay," read before the convention of the National Hay Association, Mr. Wasmuth of Roanoke Ind., said some very effective work might be done in most hay-growing sections toward teaching hay growers the needs of the market and assisting them in meeting those needs. It seems undoubted that if hay growers were generally even a little more particular in cutting and making their hay and in separating the good hay from the poor, there would be far more really good hay to supply to the markets of the country than there is under the present system—or lack of system.

In the grain trade various associations and individuals have taught the principles of judicious selection of seed and good cultivation, with, however, but little effect until crops became so poor that farmers were glad to listen to the "good seed" gospel as preached by scientists and good practical farmers. Then they began to believe that there might be something in it; and on experimenting found that good seed on only a fair soil, with good cultivation, actually gave them good crops. The farmer might be reached by special literature of some kind, but it is doubtful if he will undertake to cut his timothy a little earlier, cure it longer, keep the good hay separate from the poor and do a dozen other things that would gladden the heart of the commission man by enabling him to make one good sale at a good price instead of having to resell a given car several times because "it doesn't run even," until he is actually forced by circumstances to do so.

Our farmer is no different from the rest of human kind. He keeps on doing the same thing in the same way year after year, principally because he has been doing it that way. If he has been cutting his timothy a little late and curing and baling it as late cut timothy ought to be handled for best results, it will take a good deal of argument to convince him that his timothy will have a brighter color, perhaps a better feeding value, and certainly command a higher market price, when cut just a little sooner and cured for a little longer time. If he makes the mistake of cutting it

too soon and curing it for too short a period, he is liable to learn something interesting when the balers come along and the hay is sent off to market.

If hay buyers would discriminate against poor hay to the extent of paying a No. 1 or a No. 2 price only for No. 1 and No. 2 hay, it might help the trade to better the crop in the future, if there were concerted action. But there is always an even chance that some buyer will step in and take the poor hay at a good price when no one is looking—just to "keep the good-will" of the seller. However, here is a short lesson from the millers. They have come to the conclusion that they are themselves the ones best fitted to educate their farmers as to the needs of their trade. Similarly, we would say that hay buyers and shippers are best fitted to educate the farmers as to the needs and demands of their markets.

#### THE NEBRASKA PROCEEDING.

The testimony taken by the attorney-general in the injunction proceeding against the Nebraska Grain Dealers' Association, a hint of which appears on page 141, is not convincing. As it looks to the "man in the street," the state is after the wrong parties.

The grain trade of Nebraska is and long has been in the control of the line elevator companies and track bidders operating at Omaha, Kansas City and Lincoln. Under the circumstances it is inevitable that the "carding system" of price making should prevail throughout the state, and that individual buyers of grain should have practically nothing to say about prices. It is not to be inferred that prices to the farmers have not been right; but, as Chas. Peavey testified, the big companies have always been paid rebates, either directly or as "elevator allowances," and have been, therefore, in a position to dictate what should be done at the stations; and as appeared from the testimony of Mr. Johnson, they have exercised that power.

And Mr. York testified that the card bids for the territory with which he was familiar (and presumably for all other districts in the state) were made up by the track bidders and line companies, neither the officers of the Association in question nor individuals taking any part in that function. The business of the secretary of the Association was to keep the station buyers in line. Much stress has been laid upon this latter fact as evidence of a wicked conspiracy; but all who are familiar with the business know that there is nothing *per se* unfair to the farmer in this, but it is a condition that has the "appearance of evil;" hence the predicament of individual grain buyers, members of the Association, who are simply the victims of a condition in the state over which they have had practically no control so long as the carriers put the control of the business in the hands of the "favored companies."

It was largely for their benefit that the Association has been managed; but the companies is not the Association; and the attorney-general of Nebraska and Mr. Worrall, who are managing this campaign, should first of all "separate the sheep from the goats," and

go after the right parties, if they are really sincere in their desire to inaugurate a "square deal" in the grain business in Nebraska.

#### "A BAS" SPELT.

By some ill chance a shipment of wheat went into Michigan recently from the West, which turned out to be heavily loaded with spelt. Well, now, of course, we all know that the hospitals and mixing houses have pretty elastic consciences; but all the same it is hardly fair for the Operative Miller, on the strength of this one particular case, to assert that, "Unscrupulous grain men in all parts of the country are again getting busy to defraud millers at every possible turn."

If, as the Operative Miller alleges, "spelt looks so much like wheat, except that it is redder and more transparent, that a great many millers have not been able to detect the difference," it is barely possible that the elevator men who took it from the wicked farmer and passed it along to the Michigan miller may themselves also have been deceived by it.

There is not a great deal of spelt produced in this country, but it is sown by a few good farmers to use as feed; by others, perhaps, to fool country elevator men with, not to say to palm it off on unsophisticated millers as wheat.

This is all so bad that it would indeed be a happy solution if one could accept the advice of a Chicago grain dealers' journal which with sage solemnity of an oracular owl advises—

"If you cannot learn to recognize speltz, demand that the Agricultural Department pass a law forbidding the growing of speltz."

But as the Agricultural Department can't pass any law and Congress probably won't attempt one of the kind suggested, the best thing to be done in the premises is for grain dealers and millers alike to get busy and familiarize themselves with this obnoxious grain, and so be able to protect themselves from the wicked farmers and shippers.

#### HANDLING HAY IN CHICAGO.

The prospect of the early construction of hay warehouses in Chicago, as mentioned in another column, is as interesting to the country shippers as it is to the Chicago hay receivers and dealers, for a number of reasons. At present when the hay team tracks in Chicago are full, the railroads hold cars in yards outside the city for several days, or longer, until the team track congestion is relieved. Hay thus held is inaccessible to the trade, and the condition necessitates more or less delay in handling shipments. When the new sheds are an established fact, all cars will be brought forward promptly and unloaded ready for the thorough inspection of the local buyers.

Hay arriving in Chicago now is placed on team tracks and sold by car door inspection, which is adequate and satisfactory only when the hay in the middle and at both ends of the car is just as good and bright or better than that at the door. If there should happen to be a few bales of an inferior grade hidden

away at one end of the car, the original selling price must be scaled down or the hay resold to another party by the commission merchant who made the first sale. That this offers an excellent opportunity for dispute between the commission man and the dealer may readily be seen. That there has not been more trouble is due solely to the fact that Chicago hay receivers maintain a high standard of honesty in their dealings that is not excelled in any other city. It is invariably better for the shipper, when loading a better grade of hay, to withhold a small lot of off-grade hay or else mention the fact of its presence in the car in his advice of shipment.

When Chicago's hay is handled through warehouses, if the method employed in New York, New Orleans and Baltimore is followed, the cars will be unloaded and the hay piled in the warehouses with open spaces, or aisles, between each carload, so that an intending buyer may inspect it thoroughly. It will be possible for him to see practically every bale in a pile, and, having once closed the deal, there will be little or no recourse if he fails to exercise his privilege of thorough examination.

#### PUTS AND CALLS AT CHICAGO.

After the remarkable vote of the Chicago Board on puts and calls, that body has redeemed itself by its delay in giving recognition to that kind of illegal trading at Chicago. One is, of course, ready to agree with Mr. Crosby and the majority that the Illinois law penalizing trades in privileges is "idiotic"; but it is the law, nevertheless, and it is the duty of a great institution like the Chicago Board of Trade to obey the law first of all things.

Privilege trading is entirely legitimate trading when it is—legitimate; privileges being a form of insurance, or hedging, that has its proper place in the economies of marketing grain, especially in the export trade; but no one for a moment will consider privileges as at all necessary for the safe and economical conduct of the business of one-tenth of the 500 members who by their votes expressed their wish to have privilege trading restored to the business of the Board in spite of the law. With the rest privileges is simply another form of "speculation."

The Board had a chance last winter to at least make an attempt to secure the repeal of the obnoxious law; but its legislative committee did not dare, in the face of opinion at Springfield, to push a bill to that effect. Do the members expect that now, fifteen to sixteen months in advance of another session, to better their cause with the public by publicly announcing a purpose to defy the existing law?

Members who must trade in privileges for legitimate business reasons can do so on the Milwaukee Chamber, which is now little more than the puts and calls room of the Chicago Board, by paying telegraph bills. Better go on so for another twelvemonth, and then go before the legislature in a straightforward and manly manner and ask for a repeal of the present law. That at least is the only way the law ever will be repealed and the police kept out of the "alley."

# EDITORIAL MENTION

Put your own cribs in order and talk the value of good cribs to your farmers. Good cribs in the fall mean good corn in the spring.

It is said the Western roads have agreed to abolish the "elevator allowances." They ought to if they have any just sense of "fair play."

With farmers building granaries everywhere in the Northwest, it seems to be true that some farmers, at least, propose to bull the wheat market this fall.

A car famine is probably due this fall. Its severity cannot of course be predicted; but dealers should take it into consideration in planning the fall and winter's campaign.

Another boy is reported smothered in a grain bin, this time in Nebraska. Until children are excluded from elevators, or all bins covered as they should be, these horrible accidents will continue.

Grain men who have elevators, machinery or special kinds of grain to sell or who want to buy can get quickly into touch with the other side of the trade by a "want" or "for sale" ad in these columns. The service is cheap and effective.

J. A. Everitt, seedman and newspaper publisher of Indianapolis, and originator of the great and only "hold-your-wheat-for-a-dollar" idea of the Society of Equity, has gone into the hands of a receiver; liabilities, \$45,000. Verbum sat sapienti.

Secretary Strong, Pontiac, is preparing a new edition of the Directory of the Illinois Grain Dealers' Association, which will go to every grain shipper in the state. After the publication, quarterly supplements will be issued showing changes, which also will be sent free to members of the state association and receivers.

Senator McCumber of North Dakota is again threatening to introduce a bill to create a national bureau of grain inspection. His grain-buying neighbors in Minnesota certainly are furnishing him with lots of good ammunition this fall, and the senator is bound to use the Duluth-Superior episode with effect if he really gets busy.

With its possible influence on immigration, the Hon. R. P. Roblin, a Canadian statesman, predicted a 100,000,000-bushel wheat crop for the Canadian Northwest; and he felt comfortable under his waistcoat, until the opposition Winnipeg paper asked him point-blank, "Will Hon. R. P. Roblin explain wherein he is not the farmers' enemy when he predicts a long crop in 1905, and if he does not thus re-

duce the price offered to farmers for their wheat?" Then he had an attack of "non-assimilation of food," so to say; and no wonder.

A vast amount of good would be done toward making a "satisfied hay shipper," because he got good returns, if those who attend the trade conventions would enthuse a little and tell their neighbors, competitors and the farmers also what was done and said at those meetings. The talk might fall lightly at first, perhaps on heedless ears, but in the end it would count.

The big spring wheat crop has filled elevator men at Minneapolis and head of the lakes with the pleasant sensation of a prospective prosperous season handling this coming flood of grain. For three years they have been in the doldrums, with carrying earnings at the minimum; but now they are ready for and expect one of the biggest years in their recent history.

The Missouri law does, indeed, give color to the claim of the Missouri Railroad Commissioners that it is mandatory and requires them to assume control of the weighing of grain in all markets of the state where it is inspected; all the same it does seem just a bit curious that the Commissioners have been all this time since the law was made in 1899 in finding this out.

"When and where have railway companies refused to make a just rate after a legal judgment against an existing rate?" asks the Railway Review. But there cannot be such a judgment, the courts having said in the hay case that the Commerce Commission has no power whatever over rates; and, of course, the courts have none. But in the hay case the roads did ignore the Commission's "judgment."

The joint committee on the new uniform bill of lading has made no progress since its adjournment at Niagara Falls in July, but will assemble again in October at Virginia Hot Springs. Although the bill of lading is a most important matter to grain men, it is noteworthy that the joint committee has no member distinctively representing the grain trade. Has the regular dealer lost interest in this matter, or will he allow the other trade interests to "tote the bag," being himself too poor to support a national association to look after his interests?

The persistent discount that follows durum wheat to market, and which sooner or later must follow the golden and Russian green oats of Iowa, may or may not be a discouragement to the Agricultural Department promoters of new cereals. But the grain grower must be taught that these new crops must find a market on their intrinsic merits, wholly apart from any views the department promoters may take of their theoretical virtues and actual merits. Durum wheat flour is good flour, undoubtedly, but it does not sell in this country in quantity as yet; and it is now demonstrated that the golden and Russian green oats will not make marketable oatmeal and therefore

cannot compete with white oats in any market, unless for feed; so there is nothing left for grain buyers to do but to discriminate in price against them.

The Canadian wheat growers are again agitating the selling of wheat by sample as the only way to get a price for grain on its merits, the basis of the agitation being the Ontario Agricultural College's pronouncement that low-grade, lightweight wheat will make as good flour as high-grade wheat. True, perhaps; but not so much of it per bushel. And millers who buy the wheat must have quantity of flour and can only dock the low-grade wheat in price to equalize it with the heavyweight berry—which is the standard, of course.

Duluth claims to have had the ha-ha on the new inspection department at Superior, which inspected its first two cars of wheat (which arrived over the Omaha) as No. 1 Red Western, when the grain was, in fact, No. 2 Hard Winter Kansas. Truly, this was occasion for hilarious mirth. Buffalo receivers and Eastern millers have in times past also laughed at inspections at Head of the Lakes, but usually out of the other corner of the mouth. This may account for the "surprising indifference of Eastern millers" to Duluth's wheat offerings so far this season.

It is said the Iowa Railroad Commission is contemplating a modification of its rule of refusing applications for sites when elevators are already established sufficient to care for grain coming to market at the particular town in question. The crop of farmers' elevator companies has, of course, sufficient political influence to make the Commission uneasy under protests; but the latter might answer the farmers, as they must have answered other applicants, that if they want to operate an elevator they should buy or rent the existing houses, and not depreciate the value of all by building useless houses. In Nebraska, also, it is said the Railroad Commission, which had adopted the Iowa principle, has decided to throw down the bars and permit "free competition"; so that the railroads will be required to grant sites to whomsoever asks for them.

The campaign against golden and Russian green oats, started in Iowa by the grain dealers' association, is one that should have the cordial support of the dealers in that state. Although at a local meeting at Fort Dodge the objections to those oats were well presented by Sec'y Wells and also, and in a still more authoritative way, by A. C. Heath, manager of the Great Western Cereal Mills of that city, whose statement of the facts was published by the local paper, Messrs. Gerstenberg & Co., commission dealers of this city, have at our request presented briefly in another place the objections to those varieties of oats from the commission man's point of view; showing how useless it is for farmers to grow varieties of grain that will not sell. There is no other way to have farmers stop production than for dealers to stop buying the objectionable stuff except at a discount and strictly on its merits,

as the Iowa dealers now propose. But the trade should take particular pains to advise their farmer patrons just why the discount is made now where it was not made in the past, and that it is not arbitrary but one forced upon them by the consumers of oats.

They have a state scale inspector in North Dakota; but some local kickers intimate that he knows more about politics than scales. At any rate, he recently tested a scale at an elevator in Pembina and collected his fee. A few days later a Fairbanks-Morse man came along and examined the same scale, finding that it had sagged on one corner and would weigh correctly only up to 1,000 pounds, after which it would weigh against the elevator 50 pounds on every load. Apparently in North Dakota they need two inspectors—one to collect the fees and pay political assessments, the other to inspect the scales.

Duluth may have succeeded in smashing Wisconsin inspection at Superior; but that fact does not prove that Minnesota out-inspection is going to be any better than it has been. On the contrary, it is probably notice that it will continue about as it has been; and Eastern millers will continue to complain of the stuff they get on certificates. But there is a chance of overdoing it. Millers are getting very impatient with the way they are treated by inspectors; and it may be just as well to remind inspectors that the millers' demand for a national system of inspection reach much further than those of a few disgruntled farmers in North Dakota.

It appears that a movement has been inaugurated to secure uniform grain standards and inspection at Pacific Coast ex-ports. The first meeting at Portland accomplished nothing definite, because it would have been necessary to raise the Washington standard to 59 pounds for wheat in order to reach an agreement; but it is said the matter is to be more fully considered before the meeting when the Washington standards are made up and may be satisfactorily adjusted. Uniformity ought to benefit all the Coast without injuring anyone; and an agreement to adopt uniform standards there would be a wholesome object lesson for this side the ranges.

The Reciprocity Conference at Chicago was an earnest but very conservative body. While many of the friends of reciprocity might condemn the principle of a "double-barrel" tariff, nevertheless the stubbornness of the Senate in refusing to even consider any of the various reciprocity treaties negotiated since the Dingley bill became a law, as well as the strength of the doctrine abroad, has forced the maximum and minimum tariff policy into a place that warranted the Conference's approval of it. The danger to American trade, especially in breadstuffs and provisions, by new foreign tariffs is so immediate and threatening that the Conference was well timed with a view to crystallizing public opinion in favor of a more liberal, or, at any rate, a more business-like, attitude by this country to the whole

question of a practical working tariff outside of and beyond any academic or graft considerations of the question.

President Hill of the Great Northern is shrewd and has idealized himself in the Northwest, where press and people exclaim with the Pioneer-Press: "No Interstate Commerce Commission would have ordered so sweeping a reduction as has just been made by the Great Northern, even if it were clothed with the power to fix rates." Perhaps they might, if forced to it, as Mr. Hill was, by the acts of a commerce commission with power in Canada.

A clever swindler in Denver robbed many farmers of Nebraska and Kansas who relied on the beauty of his stationery as a guaranty of his honesty. He posed as a commission man, had offices in a fashionable building, and was assisted by a bewitching stenographer. It is said this "mail order" stunt netted about \$10,000 in about 60 days. Will the bleeding farmers have sense enough either to sell their grain next time to a local dealer or to ship to a commission man who has a tangible record? Probably not; suckers seldom become catfish.

Some time ago Michigan millers had a deal of trouble, owing to the prevalence of rye in wheat. There is always more or less trouble on this score, but in this particular year special articles appeared in most of the local weeklies all over the state, warning the farmers and advising them to cut the rye out of their wheat fields. A large number did it; and when they came to market with their wheat they realized more money for the grain without rye, and the millers were glad to pay the better price. This year it has been recommended that the millers buy wheat with rye in it only for what it is worth and refuse to pay as much for it as for wheat without rye. Experience has shown that if this is done, on future occasions there will not be so much rye in the wheat when it is brought to market.

Mr. Frazier of Bartlett, Frazier & Carrington, at St. Louis, testified before the Commerce Commission in favor of the elevator allowances, because "elevators are a necessity and must be maintained by someone," as he said. Certainly they are; and so are the country elevators a necessity; but no railroad pays anyone to maintain them, unless, perhaps, they belong to favorite line companies which get the unloading allowance, although neither the railroads nor the terminal elevators could get on without them. Mr. Frazier may believe with Mr. Moffat of Kansas City that only big shippers are entitled to these handling perquisites; and some railroad people, like those of the U. P., seem to agree with them. At least, the latter operate their road on that basis and have forced others to follow in their lead; but they would have difficulty in demonstrating that a loading fee is any more necessary to keep the big elevator going, with all its accessories of modern machinery, than it is to keep going the small houses with few appliances, which must assemble the grain from

the farms before the big elevators can get hold of it. All this allowance business seems to be arranged by the railroads on the theory that the big elevator, which needs no help of any kind, must be taken care of, but that the fellow in the country must look out for himself if he would live.

President Hill puts his Chinese proposition in a new form to an Old Settlers' meeting in North Dakota the other day:

The state of North Dakota could not raise grain enough to bake ten biscuits per capita for the inhabitants of China. Now ten biscuits would be short for a year's supply, and I don't know that you could raise enough grain—you certainly don't raise enough grain—to make two biscuits per capita. . That is a market that seems to me to be unlimited.

Now, if Mr. Hill will just tell us how the said Chinamen can be induced to bake ten biscuits per annum and pay for them, the North Dakota farmer, or some other, will certainly make a move to supply the stuff to bake them off.

The Boykin anti-bucket-shop bill in the Georgia legislature, which has the approval of the House committee, not only makes it a misdemeanor with a penalty of \$500 fine to operate what are technically known as bucket-shops in Georgia, but the same penalty is attached for posting in any place of business any market quotations similar to those which are usually made a basis for dealings in futures. The object of the bill is to wholly prohibit in Georgia any dealing in commodities on future contracts, and it goes so far as to prohibit such deals being made on telegrams from Georgia by outside points. So Mr. Boykin is not content to destroy the fly that stings his peaches, but he must needs cut down the trees and swear off from eating peaches at any time and in any form.

T. D. Worrall of Lincoln is posing as the Tom Lawson of Nebraska. Mr. Worrall, like his Boston namesake, will soon publish a book, telling the story of "the grain trust in Nebraska" from "A to Izzard," including his own part therein—just like Lawson. Mr. Worrall promises to make a clean breast of it—to "conceal and cover up nothing." Let it be hoped this is an exact statement. There are lots of interesting things on the inside of the grain trade—in Nebraska. But let Mr. Worrall tell them straight—as they are. For we would like to agree with the Howells (Neb.) journal, which says:

We are of the opinion that the fellows who are doing the loudest howling would be in favor of an organization and a uniform price were they engaged in buying grain. It is about the only way that any business can be conducted with profit, and that is the object of every man who engages in trade of any kind. We do not believe that an unreasonable profit is exacted by the majority of the firms engaged in the grain business in this state. We are willing to admit that there are cases where the farmers have been wronged, but such cases are fully as frequent in every other line of trade.

If, however, unreasonable profits were exacted, how were they gotten and who got them?

## TRADE NOTES

It is expected that the Pennsylvania Railroad will erect a grain drier near its elevators at Canton, Md.

The Minneapolis Steel & Machinery Co., Minneapolis, Minn., will enlarge their plant by the erection of several brick buildings.

The Cyclone Blow Pipe Co., Chicago, have just installed a dust collector in the Kankakee, Ill., elevator of the White & Rumsey Grain Co. They also installed their dust collector in the new Illinois Central Elevator at New Orleans.

The Burrell Manufacturing Co., Bradley, Ill., have just installed a large blanking press and are now well equipped for making heavy-gauge buckets. Their factory is running night and day now on orders for elevating and conveying machinery.

As stated in their advertisement elsewhere in this issue, the B. S. Constant Co. of Bloomington, Ill., have been granted letters patent on the improvements found in their United States Corn Sheller. The company is having remarkable success with this machine.

The plant of the Foos Gas Engine Company of Springfield, Ohio, which covers more than three acres of floor space, is crowded with work. This plant is devoted exclusively to gas and gasoline engines. The company recently installed a large amount of new machinery and they have found it necessary to increase their capacity several times in the last two years in order to take care of the business.

The Boston & Maine Railroad has ordered a large Hess drying and cooling equipment to be erected at once at the Mystic Elevator, Boston, Mass. This equipment will take care of 10,000 to 15,000 bushels of grain daily, and is intended for exclusive use on export grain. The action of the Boston & Maine Railroad was quickly followed by similar action on the part of the B. & O. Railroad. This company has ordered from the Hess Warming & Ventilating Co. of Chicago a No. 10 Hess Drier and Cooler, to be erected at Locust Point, Baltimore, in time for the crop of 1905. This machine will have a daily capacity of about 50,000 bushels, and will be similar in construction to the large drying plant in New Orleans, owned by the Illinois Central Railroad. It is evident that the railroads having Atlantic Coast terminals are determined to give their patrons the best facilities available in the handling and marketing of grain.

Elevator and other cables used for hoisting purposes are subject to both internal and external wear; the former is caused by the rubbing of the wires and strands upon one another under pressure in bending over the sheaves, the latter by rubbing and wedging in the grooves of the pulleys. Unless the cables are kept well lubricated they wear and deteriorate rapidly. As a lubricant for wire rope Dixon's Ticonderoga Flake Graphite has the endorsement of the leading manufacturers as well as the approval of those experienced in its use, because of the well recognized fact that flake graphite prevents the abrasion and wear of all parts coated with it. For this purpose graphite must be combined with suitable greases to make it adhere, but there has always been considerable danger and difficulty in applying grease to moving cables. Dixon's Handy Graphite Rope Dressing supplies the ideal qualities of Dixon's Flake Graphite as a wire rope lubricant in such a form as to make it thoroughly acceptable to practical men who have used it. The package is of about the size and shape of an ordinary book and contains nearly three pounds of graphite lubricant. It is easily applied by holding the open edge of the package against the cable while in motion. There is no trouble

and no danger to the workman, no waste nor dripping off of lubricant. The economy and efficiency of Dixon's Handy Graphite Rope Dressing, in prolonging the life of wire rope and saving the expense of frequent renewals of worn cables, should commend it to the careful attention of every firm operating hoists or elevators. For prices and full particulars address the makers, the Joseph Dixon Crucible Co., Jersey City, N. J.

The Kingsland-Kay-Cook Mfg. Co., manufacturers of power transmitting, elevating and conveying machinery at St. Louis, Mo., have opened an office at 401 Monadnock Building, Chicago, in charge of Norman W. Chamberlin, who will look after the company's rapidly growing business in Chicago and vicinity. Mr. Chamberlin is an experienced man in elevating, conveying and power transmission machinery, having grown up in the business.

The Dodge Manufacturing Co. of Mishawaka, Ind., has issued its 1905 catalogue, C-7, which is standard size, 6x9 inches. This book, containing 416 pages, has been built for the express purpose of furnishing all those interested in power transmission equipment with the most up-to-date and dependable data that can be compiled, making it a veritable textbook on this subject. A most commendable feature is the coding of the entire book and that, too, in alphabetical order. Certain combinations have been effected requiring but one code word to designate certain information that in tables and price lists, as ordinarily coded, takes from eight to ten words. The American system of rope transmission has been entered into and exploited very thoroughly. This, the standard edition, is bound in library style with rigid backs and is intended for desk purposes only. To meet the demand for a 4x6 pocket edition the company are having a complete reduction made which will be known as C-7 Junior and will be ready for distribution about September 15.

### GRAIN RECEIPTS IN MINNESOTA.

The State Railroad and Warehouse Commission of Minnesota has issued a circular calling attention to the law enacted by the last state legislature, making it a misdemeanor punishable by fine or imprisonment in the county jail for any person connected with an elevator to neglect to issue a warehouse receipt when grain is delivered to the elevator to be stored.

The law was enacted to meet a situation created by dishonest agents, who in the past had swindled both owners of elevators and farmers alike. Due bills, or slips, no record of which was made on the books of the agents, were given to the farmers, and the proprietors of the elevators were made to believe that the grain belonged to the elevator. When the matter got into court the farmer had nothing to prove that he owned the grain, except the due bill, or slip, which often did not tell what kind of grain or what quality it was supposed to represent. Much litigation resulted.

The new law makes it a misdemeanor for the farmer to receive slips or due bills, as well as for the agent of the elevator to issue them.

Minneapolis had her first 1,000-car day on September 5, the double holiday over Sunday and Monday bringing 1,369 cars of grain into Minneapolis. Of the number 838 contained wheat, 239 had barley, 179 had oats and 79 flax.

While in St. Paul on a recent lecture tour, which was more or less of a "triumphal march," as his audiences were immense, Governor La Follette was the guest of the St. Paul Board of Trade, and discussed the question of rate regulation with its representatives. G. S. Loftus, vice-president of the Board, is also an active proponent of railroad reform in Minnesota, and through his influence Governor La Follette met a committee of four from the Board at dinner, heard their views on rate regulation and gave some valuable suggestions.

### SACK AND BAG TURNER.

The importance of turning and cleaning bags and sacks which are used over and over should not be overlooked, as otherwise they soon become coated with dust and the seams and corners loaded with doughballs and other accumulations, forming an admirable place for moths, weevil and other mill pests, which not only destroy the sacks, but are soon distributed throughout the entire mill.

We illustrate herewith a most ingenious and valuable device in the way of a patented bag and sack turner manufactured by the S. Howes Company of Silver Creek, N. Y. Bag manufacturers, millers and warehousemen who have any number of sacks or bags to be turned will find this device a great labor saver. With it a boy can turn four to five times as many sacks as can be done by hand. A perfect turn of the sacks is accomplished, the corners being fully extended.

This sack turner was originally introduced some years ago to the millers of Europe, where the flour bags are returned to be refilled. It proved so val-



EUREKA SACK AND BAG TURNER.

uable that it was adopted by nearly all of the mills of England and continental Europe. Users in this country find it quite indispensable, being one of the most valuable labor-saving devices in their mills.

It is built entirely of iron, steel and brass and will last practically forever. The operation is very simple; the flap, or open edge, is placed over the top rollers, the bag pulled down wrong side out and then lifted off the turner.

In connection with this sack and bag turner the S. Howes Company also build a small iron machine known as the "Eureka" Sack and Bag Cleaner, which thoroughly beats, brushes and ventilates the sacks after turning. Thus, with two small and inexpensive mechanical devices the slow, expensive and imperfect turning and cleaning of sacks by hand may be obviated and all sacks and bags about the mill kept clean and free from all accumulations and bugs and worms, giving much longer life to the sacks.

Prices, circulars and further information will be promptly furnished upon application to the manufacturers, the S. Howes Company, Silver Creek, N. Y.

The broom corn harvest is over, notwithstanding a general complaint of the scarcity of hands, and most of the brush is now on the shelf. The yield is remarkably good, several growers reporting a ton to two acres, while a ton to two and one-half acres is common.

The Kansas grain sidetrack law, which was passed by the last legislature, is now to be tested in the courts, by means of a writ of mandamus issued on September 1 by the Supreme Court at the request of the State Board of Railroad Commissioners, to compel the Rock Island to build a switch to an elevator at Medora.

## RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of August, 1905:

**BALTIMORE**—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	754,266	1,044,795	716,000	56,040
Corn, bushels.....	446,372	108,199	333,350	75,278
Oats, bushels.....	781,054	357,128	645	462
Barley, bushels.....	1,075	2,112	.....	.....
Rye, bushels.....	38,762	13,279	.....	.....
Timothy Seed, lbs.....	774	8,230	675	717
Clover Seed, lbs.....	.....	610	.....	.....
Hay, tons.....	3,737	2,919	752	1,046
Flour, bbls.....	205,217	149,078	39,472	56,307

**BOSTON**—Reported by Daniel D. Morss, acting secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Flour, bbls.....	144,653	133,635	44,088	41,787
Wheat, bushels.....	27,162	266,370	7,964	117,741
Corn, bushels.....	1,068,244	215,167	836,167	308,348
Oats, bushels.....	545,464	593,391	20,000	1,200
Rye, bushels.....	3,355	1,976	.....	.....
Barley, bushels.....	48,703	1,000	44,762	.....
Flaxseed, bushels.....	.....	.....	.....	.....
Mill Feed, tons.....	704	1,162	32	64
Cornmeal, bbls.....	1,907	4,097	834	1,258
Oatmeal, bbls.....	9,951	7,302	2,604	7,010
Oatmeal, sacks.....	1,485	7,042	320	5,880
Hay, tons.....	5,780	5,930	1,276	696

**BUFFALO**—Reported by F. Howard Mason, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	2,422,147	2,798,070	502,726	.....
Corn, bushels.....	6,828,905	5,336,896	190,893	.....
Oats, bushels.....	2,350,305	370,700	770,520	.....
Barley, bushels.....	380,083	315,175	169,382	.....
Rye, bushels.....	82,500	40,000	.....	.....
Timothy Seed, lbs.....	.....	.....	.....	.....
Clover Seed, lbs.....	.....	.....	.....	.....
Other Grass Seed, lbs.....	.....	.....	.....	.....
Flax Seed, bushels.....	.....	.....	.....	.....
Broom Corn, lbs.....	.....	.....	.....	.....
Hay, tons.....	.....	.....	.....	.....
Flour, bbls.....	1,045,864	868,700	.....	.....

**CHICAGO**—Reported by Geo. F. Stone, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	5,602,390	5,224,468	1,859,120	1,836,337
Corn, bushels.....	8,497,062	7,551,500	11,615,364	8,238,743
Oats, bushels.....	12,966,466	13,070,386	6,519,253	4,612,789
Barley, bushels.....	879,432	579,750	213,465	120,600
Rye, bushels.....	207,002	287,340	83,032	47,398
Timothy Seed, lbs.....	2,150,211	2,031,985	774,003	2,180,519
Clover Seed, lbs.....	9,866	125,885	89,941	79,155
Other Grass Seed, lbs.....	578,077	624,669	4,158,220	3,119,844
Flax Seed, bushels.....	341,455	275,395	72,432	200,620
Broom Corn, lbs.....	511,350	1,025,143	319,756	608,493
Hay, tons.....	16,714	20,382	1,052	1,010
Flour, bbls.....	716,040	517,105	746,499	387,280

**CINCINNATI**—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	497,611	253,248	457,532	170,592
Corn, bushels.....	507,284	649,272	206,760	446,314
Oats, bushels.....	1,342,854	888,163	896,598	513,399
Barley, bushels.....	9,000	2,000	70	1,000
Rye, bushels.....	83,954	32,443	24,560	1,636
Timothy Seed, bags.....	2,864	7,181	1,684	1,830
Clover Seed, bags.....	327	352	324	256
Other Grass Seed, bags.....	9,257	6,770	6,267	5,227
Flax Seed, bushels.....	.....	.....	.....	.....
Broom Corn, lbs.....	7,724	6,039	4,416	2,223
Hay, tons.....	134,336	120,476	76,676	81,243

**CLEVELAND**—Reported by M. A. Havens, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	252,360	97,209	29,954	20,271
Corn, bushels.....	577,027	312,916	328,476	308,850
Oats, bushels.....	2,816,674	2,379,463	897,485	479,566
Barley, bushels.....	2,038	.....	.....	.....
Rye, bu. and other cereals.....	5,294	8,536	857	.....
Flaxseed, bushels.....	.....	.....	574	.....
Hay, tons.....	3,674	3,718	909	996
Flour, tons.....	5,956	4,111	3,124	2,060

**DETROIT**—Reported by F. W. Waring, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	198,001	266,402	21,064	29,745
Corn, bushels.....	455,030	227,117	116,584	30,733
Oats, bushels.....	468,304	898,341	50,553	155,672
Barley, bushels.....	900	900	.....	.....
Rye, bushels.....	118,301	27,470	11,998	8,068
Flour, bbls.....	30,400	35,500	11,100	15,800

**DULUTH**—Reported by H. B. Moore, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.			

# ELEVATOR AND GRAIN NEWS

## ILLINOIS.

J. E. Potter has completed his elevator at Douglas, Ill.

A 60,000-bushel elevator has been erected at Buckingham, Ill.

Bartlett, Kuhn & Co. of Chicago have completed their elevator at Humrick, Ill.

Puett & Williams are reported to have sold out their grain business at Colfax, Ill.

The Weller Manufacturing Co. of Chicago has purchased an Improved Hall Distributor.

Stege Bros. of Matteson, Ill., have bought an Improved Hall Distributor for their elevator.

The Cropsey Elevator Co. of Cropsey, Ill., has increased its capital stock from \$5,000 to \$10,000.

The Peru Elevator Co. of Peru, Ill., is enlarging its feed grinding department by the erection of an addition.

The Bieber Grain and Lumber Co. succeeds Fred Oberhelman & Bro. in the grain business at Sublette, Ill.

The stockholders of the Mahomet Grain Co., Mahomet, Ill., held a meeting on September 2 for the purpose of increasing the capital stock.

The elevators at Earlville and Rollo, Ill., owned by Geo. W. Mondie, have been purchased by Edward Weidner, who will take possession October 1.

O. M. Kelly of Dana, Ill., has bought the grain business and elevators of Ream & Kelso at Losant. Mr. Kelly formerly conducted an elevator at Dana.

W. H. Westbrook and Hopwood Bros. of East Lynn, Ill., are making improvements and overhauling their elevators at that point. O. M. Paynter is doing the work.

Articles of incorporation have been filed by the Monica Elevator Co. of Monica, Ill. The capital stock is \$5,000 and the incorporators are Archibald Smith, Michael Kelly and Wm. T. Wallicker.

The B. S. Constant Co. of Bloomington, Ill., is furnishing the machinery, which includes the U. S. Corn Sheller, for J. W. Gregory's elevator at Stockland, Ill. Mr. Gregory has a line of houses.

The Fitte Elevator Co. of Witt, Ill., has been incorporated with a capital stock of \$10,000 to deal in grain and implements. The incorporators are Wm. T. Brice, Henry Heinemann and Thomas Manktes.

The Bolivia Farmers' Grain Co. of Bolivia, Ill., has been licensed to incorporate, with a capital stock of \$5,000, for the purpose of dealing in grain, coal and implements. John S. Baker, W. H. Lee and W. L. Igou are the incorporators.

The L. F. Webb Grain Co. has bought the elevator at Assumption, Ill., formerly operated by the late Elijah Walker and F. J. Mitchell. The purchase price was \$9,000. The new management takes possession September 15. Walter Walker, who has been in charge of the elevator, will remove to Decatur.

Nobbe Bros., grain dealers of Farmersville, Ill., have completed their 10,000-bushel house at Litchfield. They will do business at the latter place under the style of the Nobbe Grain Co. The new house is thoroughly modern and is equipped with a Fairbanks Track Scale. A spur track has been put in from the Wabash Railroad.

The Findlay Grain and Coal Co. at Findlay, Ill., contemplates doubling its handling and carrying capacity to provide for the increasing business. A new elevator is probable, rather than the enlargement of the old one, although new machinery will be placed in the old plant. Business has rapidly increased under the present management.

J. H. Opie, who has been conducting the grain and stock business of Opie Bros. at Apple River, Ill., since the death of his brother William, has sold out to William McQuillen. The firm of Opie Bros. was in business at Apple River for 25 years. For a number of years they handled only stock, but later purchased the grain business of the late Robert Irvine.

Jansen Doe, general superintendent of construction of the Cleveland Grain Co., was at Champaign, Ill., recently and started work on the company's elevator at that place. There will be eight grain tanks each 75 feet high and 25 feet in diameter. It was first planned to build these cylinders of concrete, but it has now been decided to use a

special variety of tile manufactured in segments of a circle and reinforced with steel rods.

## SOUTHERN AND SOUTHWESTERN.

Reported that a 10,000-bushel elevator is to be built at Chandler, Okla.

Joseph F. Riley Co. succeeds Riley & Silk, grain shippers of Birmingham, Ala.

Reported that W. P. Wileman will build a grain elevator at Maypearl, Texas.

The Patton-Hartfield Co. will build a 50,000-bushel elevator at Memphis, Tenn.

James Kuykendall has bought the grain and feed store of W. H. McDermott at Hallettsville, Texas.

The Pulaski Cotton & Grain Co. has commenced to enlarge and thoroughly overhaul its plant at Pulaski, Tenn.

The El Reno Mill & Elevator Co. of El Reno, Okla., has equipped its elevator with an Improved Hall Distributor.

The Eufaula Cotton Oil Co. of Eufaula, I. T., will erect a grain elevator, to be run in connection with the oil mill.

The National Rice Milling Co. of New Orleans, La., has taken out a permit for a frame elevator building to cost \$51,000.

The Hardy Grain Co. of Obion County, Tennessee, has certified to an increase in capital stock from \$60,000 to \$100,000.

Two new elevators have been completed at Snyder, Okla. The town, which was destroyed by a cyclone last May, is rapidly being rebuilt.

Work on the grain storage building which is being erected in addition to the City Mills of J. Allen Smith & Co., at Knoxville, Tenn., is nearing completion.

The Ballard & Ballard Co. of Louisville, Ky., has been granted a permit to erect grain tanks at Broadway and Campbell streets, that city, at a cost of \$12,500.

One of the bins in the recently completed concrete elevator of the Hodgenville Elevator Co., Hodgenville, Ky., was found to be defective, necessitating immediate repairs.

The Farmers' Gin, Grain & Fuel Co. of Sentinel, Okla., has been incorporated with a capital stock of \$10,000 by W. R. Boyson, W. A. Banks, Charles Kent, J. B. King and I. M. Wright.

The Texas Grain & Flour Co. has been incorporated at Fort Worth, Texas, by M. P. Bewley of Fort Worth, J. C. Malley of Gainesville and B. R. Neal of Dallas. The capital stock is \$10,000.

The McLaughlin Coal & Grain Co. has been incorporated at Memphis, Tenn., with a capital stock of \$50,000, by M. E. McLaughlin, M. P. McLaughlin, Louis Thornton, A. J. Cook and G. W. Bagnal.

The Dazey-Moore Grain Co. of Fort Worth, Texas, has filed articles of incorporation. The capital stock is \$25,000 and the incorporators are: K. F. Dazey and T. G. Moore of Fort Worth and C. H. Miller of Shreveport, La.

The Brook-Rauch Mill & Elevator Co. of Little Rock, Ark., has been chartered with a capital stock of \$30,000, all of which has been subscribed. The officers are: R. T. Brook, president; M. Brook, vice-president, and Alex J. Rauch, secretary and treasurer.

H. K. Holman, a grain dealer of Fayetteville, Tenn., has been succeeded by the H. K. Holman Co., incorporated, which will enlarge the plant. Two new buildings will be erected, one 70x150 feet and one 50x100 feet. The company is capitalized at \$20,000.

Herbert Irwin and George W. Graham Jr. have applied for a charter to engage in the wholesale grain and provision business at Charlotte, N. C., under the style of the Irwin Grain Co. Mr. Irwin has been with the Adams Grain & Provision Co. of that city for several years.

Two new elevators are to be erected at Nashville, Tenn., at once. The Capital Grain Co., of which Robert McLenore is president, will build a \$15,000 house and J. R. Hale & Sons will put up one to cost \$25,000. The former will have a capacity of 12,000 bushels and will be erected on the site of the old power house of the Nashville Railway & Light Co. The Hale Elevator will be located at Tenth Avenue and Jefferson Street and will have a capacity of 20,000 bushels. It will be 95 feet high and 260x100 feet on the ground.

Advices from New Orleans, La., state that the Harris-Scotten Co. of Chicago has made arrangements to lease the Illinois Central Elevator "E," now in course of erection. The Harris-Scotten Co. leased the Illinois Central Elevator "D" at New Orleans last year, and at that time, it is said, tried to lease both houses. The railroad company then was unwilling to lease Elevator "E," but it is stated that the arrangement with the grain company operating one elevator was so satisfactory

last year that the railroad has consented to turn over the other elevator at Stuyvesant docks.

The Washburn-Crosby Co. has taken out a permit for the erection of a \$25,000 grain elevator adjoining its flour mill at Floyd and H streets, Louisville, Ky. The house will be 42x195 feet and the highest point of the structure will be 90 feet from the ground. The roof will cover four grain tanks, which have already been constructed.

The Canadian Midland Elevator Co. of El Reno, Okla., has been purchased by J. W. Maney of Oklahoma City, for a consideration of \$150,000. The mill has a capacity of 1,000 barrels daily and the grain storage capacity is 500,000 bushels. The transfer perfects one of the largest elevator lines west of Kansas City. James and John Maney have a long line of elevators on the Rock Island west of Oklahoma City and another on the Frisco in West Oklahoma, together with a line in Indian Territory. The headquarters will be at El Reno.

## EASTERN.

Messrs. Hardie, Coombs and Jack have opened a grain store at Bowdoinham, Me.

George Drew of Union, N. H., has opened a branch grain store at Milton Falls.

Daniel Seffens is building an addition to his grain warehouse at Bardwell, Mass.

Clarence Reed recently disposed of his interest in the grain and feed business at Colrain, Vt.

H. T. Brockelmann has opened a wholesale and retail grain and produce store at Clinton, Mass.

The new elevator of Holmes, Keeler & Selleck Co. at Norwalk, Conn., is nearing completion. A large feed store and grain mill, which is being erected by the Boston Excelsior Co. at Milo, Me., is nearing completion.

The R. L. Cleveland Co., which operates two grain and provision stores at Salem, Mass., has greatly increased its facilities.

The Potter Grain Co. has completed the foundations for its new elevator at Gardner, Mass., and is now at work on the superstructure.

A. H. Reynolds & Co. are preparing to build a grain elevator at Essex, Conn. The house will have a frontage of 75 feet and will be 100 feet deep and three stories high.

George and Ross McKay are building an addition 24x36 feet to their bean house at Caledonia, N. Y. Twenty picking machines will be set in another addition, 12x30, in place of the sixteen now in use.

The Clinton Milling & Grain Co. of Plattsburg, N. Y., has been incorporated under the laws of the state with a capital of \$7,000. The directors are: Henry Davis and John K. Collins of Plattsburg and A. J. Davis of Denver, Colo.

The Belfast Grain Co. has begun business at Belfast, Me. The firm is composed of Merrill, Runnels & Mayo of Waterville and Fred S. Jackson of Belfast. Merrill, Runnels & Mayo own and operate two mills in Waterville and make a specialty of carload grain.

The Vilas Elevator at Swanton, Vt., has been sold to Bailey & Co. of Chicago and Montpelier. The business will be run in connection with their grain business at Montpelier, and Mr. Bailey Jr. states that Swanton will be made the general distributing station on the line of the Central Vermont Railroad.

The E. A. Buck Co. of Willimantic, Conn., has been incorporated with a capital stock of \$10,000, to deal in flour, feed and grain. George E. Buck, Theodore R. Parker and William A. Buck are the incorporators. The company succeeds the firm of E. A. Buck & Co., which was dissolved by the death of the senior partner, Edwin A. Buck.

A feed mill is to be constructed in the big Electric Elevator on the Buffalo River at Buffalo, N. Y. The contracts for the mill have all been let and the work has been started. The new mill is designed to manufacture mixed feeds and will be under the management of F. L. MacLean, who is the manager of the Electric Elevator. The engineering work is being done under the direction of A. E. Baxter of the A. E. Baxter Engineering & Appraisal Co., Buffalo. The plant will have a capacity of 300,000 bushels daily and will be fireproof. The estimated cost is \$20,000.

The Lackawanna is reconstructing its grain pier at Hoboken, N. J. For this reason it is impossible to lighter loose grain from cars to canal boats and the company has concluded to go out of the grain handling business at this pier for the time being. It will probably be several weeks before the new pier will be completed. When the work was started the company banded the loose grain by setting apart a portion of the pier for this purpose while new work was going on at the other part, but this was not found to be expedient and was abandoned. Some grain is re-

ceived in sacks and this will be handled and transferred at the pier as usual.

The new elevator on the Mystic Docks at Boston, Mass., which replaces the house burned last year, is practically completed. The John S. Metcalf Co. of Chicago prepared the plans for the new structure and work was begun in April. The house is 144 feet in height, but does not occupy as much space on the ground as did the burned structure. The capacity is 456,000 bushels. The equipment is modern throughout.

#### MINNESOTA AND WISCONSIN.

The elevator at Westby, Wis., has been completed.

The new elevator at Crookston, Minn., has been completed.

A farmers' elevator is being built at Long Prairie, Minn.

Hoffman & Haen have completed their elevator at Renville, Minn.

The new elevator at Brooten, Minn., is practically completed.

Joseph Kraker is reported building an elevator at Birch Lake, Minn.

The elevator at Chatham, Minn., is reported to have changed hands.

The new elevator at Holland Siding, Holland, Minn., has been completed.

The Monarch Elevator at New York Mills, Minn., has been overhauled.

Len Rice is building an elevator and grain warehouse at Park Rapids, Minn.

Reported that the Northwestern Co. is building an elevator at Maynard, Minn.

The Farmers' Elevator Co. of Milroy, Minn., is in possession of its new house.

The Northern Grain Co. is building an addition to its elevator at Ellsworth, Wis.

The St. Anthony and Dakota Elevator Co. has torn down its elevator at Wylie, Minn.

The Benson Grain Co. has opened its elevator at Hills, Minn., with Ed Larson as buyer.

The Red Lake Falls Milling Co. is building an elevator at a new Soo town near Warren, Minn.

Nelson Bros. have completed their elevator at Milroy, Minn., and have placed it in operation.

The Farmers' Elevator Association has leased Axel Englund's grain elevator at Glenwood, Minn.

Eastern parties will, it is reported, build an elevator at Burr, Minn., giving the town three houses.

W. W. Cargill & Co. have leased the S. J. Sanborn elevator at Racine, Minn., for the season.

The farmers' elevator company has opened its new house at Holloway, Minn., with Ed Trumble in charge.

The Farmers' Elevator Co. of Vesta, Minn., has bought the house of the Western Elevator Co. at that point.

The Farmers' Elevator Co., recently organized at Beaver Creek, Minn., will rent an elevator for the first year.

The Farmers' Elevator Co. of Duluth, Minn., has filed articles of incorporation. The capital stock is \$10,000.

The capital stock of the Wolverton Elevator Co. of Wolverton, Minn., has been increased from \$2,500 to \$10,000.

E. L. Barnes has completed the improvements in his elevator at Milton, Wis. A scale and grain dump have been added.

W. H. Blake has sold his elevator at Fairmont, Minn., to the Elliot Elevator Co. S. H. Blair will be buyer for the latter.

The Farmers' Grain Co. has improved its elevator at New Richmond, Wis., and has made an addition to the lumber sheds.

A new roof has been placed on the J. L. Parchman elevator at Black River Falls, Wis., and a new driveway has been put in.

E. L. Williams, who recently purchased the Peterson Elevator at Lester Prairie, Minn., has taken possession of the house.

H. C. Maxon recently sold his warehouse and grain business at Humbird, Wis., to E. J. Foster of Fairchild, Wis., who will continue.

The Faribault Elevator at Faribault, Minn., has been purchased from the receiver by the Crown Elevator Co. of Minneapolis, for \$2,500.

The Powers Elevator Co. of Minneapolis has leased the Spaulding Elevator at Mapleton, Minn., and has placed Ed Willis in charge as buyer.

The Benson Grain Co. has opened its elevator at Slayton, Minn., with T. M. Lee in charge. Sage Bros. have also opened their house at Slay-

ton, but the Hubbard & Palmer and Peavey elevators at that place will not be operated this season.

The Minnesota Western Elevator Co. has bought the house of August Borneman at Bronson, Minn., and has placed O. D. Christenson in charge.

John J. Pihale is installing grain elevating machinery in a building recently purchased at Mankato, Minn. A wagon scale has been put in.

The new farmers' elevator at Bird Island, Minn., the seventh for that town, has been completed. The company will deal in fuel and will also grind feed.

A hopper scale has been installed in the Luverne Farmers' Co-operative Elevator at Luverne, Minn. Other improvements have also been made.

The M. N. W. Elevator Co. has repaired Elevator No. 4 at Brandon, Minn., which has not been used in a number of years. It will be operated this season.

The Farmers' Elevator Co. of Springfield, Minn., has filed an amendment to its articles of incorporation, limiting the amount of indebtedness to \$25,000.

The elevator of the Pierce-Stephenson Elevator Co. at Racine, Minn., has been remodeled and a new dump scale and a gasoline engine have been installed.

S. N. Knudson, J. N. Lee and Charles Cook are building an elevator and store building at Hanson, Wis., a siding half way between Osseo and Price.

The Sullivan Elevator Co. of Minneapolis has incorporated with a capital stock of \$50,000. Daniel C., John M. and Mary A. Sullivan are the incorporators.

The Thorpe Elevator at Long Prairie, Minn., which has been closed for several years, will be operated this season. John Garding of Rockville, Minn., is in charge.

The Lester Prairie Grain Co. of Lester Prairie, Minn., has been incorporated with a capital stock of \$10,000. William Machemehl is president and E. G. Robinson is secretary.

The business men of Windom, Minn., have rented the old McGregor Elevator and have turned it over to the Co-operative Elevator Co., recently organized at Windom.

The addition to the Pride Elevator Co.'s house at Owatonna, Minn., has been completed. The structure is 20x24 feet and will be used for storing and handling flour and feed.

The Mutual Elevator at Ceylon, Minn., has been opened for business. This is the house formerly owned by the Interstate Elevator Co., and it has been purchased by a co-operative company.

Work on the new elevator at Viroqua, Wis., is under way. The crib will be 24x27 feet and 40 feet high, with a cupola 20 feet in height. The house will have a capacity of 18,000 bushels.

The Two Creeks Trading Co., which has been incorporated at Two Creeks, Wis., with a capital stock of \$25,000, is empowered to deal in grain, hay, flour and feed in addition to other lines.

August Froeming of Algoma, Wis., has rented the Syke Co. warehouse at Forestville, Wis. It is understood there will also be a change in the management of the Cargill Elevator at that place.

The new elevator of the Western Elevator Co. at Claremont, Minn., is in operation. The Van Dusen house at this place has been extensively remodeled. A new dump scale has been put in.

The Montevideo Milling Co. has bought the J. D. Jacobs Elevator at Granite Falls, Minn., and has placed L. C. Ewing in charge. The company will handle flour and feed in addition to buying grain.

E. J. Lachmann of Neenah, Wis., and W. L. Finton of Minneapolis have organized the Lachmann-Finton Co., to do a wholesale grain business at Neenah. A specialty will be made of milling wheat.

The Milan Farmers' Elevator Co. of Milan, Minn., has incorporated with L. H. Dalen as president and C. R. C. Blom secretary. The contract has been awarded for a 25,000-bushel elevator to cost \$3,900.

The Miller Elevator Co. of Minneapolis has purchased from the Northern Grain Co. the old farmers' elevator at Graceville, Minn. The company will run the house this fall, having engaged P. J. McLoone as agent.

The C. Betcher Lumber Co. has completed its grain elevator at Douglass, Minn. In addition to handling grain and coal the company will maintain a lumber yard. Fred Tubessing of Red Wing is in charge as manager.

Sylvester Stewart, a miller of Morris, Minn., has bought the farmers' elevator at Chokio, Minn. He contemplates making some needed improvements, and is negotiating with the railroad company for additional ground upon which to build

an annex for storage purposes. W. H. Nairn has been placed in charge.

The Farmers' Co-operative Co. of Pipestone, Minn., has bought the Ashton & Gurley elevator at that place. The house has a capacity of 17,000 bushels. Charles Cunningham is president of the company and W. B. Brown secretary.

From Minneapolis it is announced that 120 new elevators are being erected along the new line of the Soo from Thief River Falls, Minn., to Kenmare, N. D., a distance of 300 miles. The road is expected to be in operation by October 15.

The formal transfer of the elevators, coal sheds, etc., at Lakefield, Jackson and Okabena, Minn., by the S. Y. Hyde Elevator Co. of La Crosse, Wis., to the Bennett Grain Co. of Flandreau, S. D., has been made. The consideration was \$15,000.

Articles of incorporation have been filed by the Henderson Grain Co. of Minneapolis. The capital stock is \$25,000 and the incorporators are Henry P. A. Martyn, Robert J. Henderson, Iona M. Henderson and Minnie P. Martyn, all of Minneapolis.

The Farmers' Elevator Co. of Cleveland, Minn., has been incorporated with Herman Zimmerman as president and W. W. Flowers as secretary. The capital stock is \$10,000. The company has purchased the Hyde Elevator for a consideration of \$4,000.

E. A. Brown has bought W. J. Kinne's elevator on the Rock Island at Luverne, Minn., and will operate it under the management of the former owner, Mr. Kinne. Mr. Brown sold his elevator at Luverne to the Farmers' Co-operative Co. a year ago.

The Security Elevator Co. has taken charge of Gust Halvorson's elevator at Boyd, Minn., and will not open their old house at that place for the present. A. E. Ahre of Dawson will be the agent and Mr. Halvorson will represent the Security company at Marietta.

John J. Coffey, proprietor of the Luverne Roller Mills, Luverne, Minn., has bought the grain elevator and coal business of the American Grain Co. at Ash Creek, Minn. I. W. Brown will be retained as manager, and flour and feed from the Luverne Mill will be handled.

Articles of incorporation have been filed by the Farmers' Elevator Co. of Lismore, Minn. The capital stock is \$20,000 and the incorporators include Andrew Peters, L. W. Johnson and Barney Thier. The company has leased the Rieckhoff Elevator at Lismore for one year.

The Hastings Farmers' Elevator Co. has bought Elevator "A" at Hastings, Minn., from the Miller Elevator Co. of Minneapolis for \$6,500. The farmers' company has filed articles of incorporation with a capital stock of \$10,000. The incorporators are Edward C. Murray, Wm. H. O'Connell and others.

The Farmers' Co-operative Elevator, Coal and Lumber Co. has bought the Guthrie Elevator at Austin, Minn. The company originally planned to build a new house, but was not able to have one completed in time for this season's business. However, the company will build coal sheds on the Great Western as planned.

The Merchants' Association of Little Falls, Minn., has arranged to buy grain this season. At a recent meeting a committee was appointed to secure an elevator, employ a buyer and make other necessary arrangements. Several seasons ago the business men united in conducting a grain elevator, with satisfactory results.

#### OHIO, INDIANA AND MICHIGAN.

The Paoli Milling Co., Paoli, Ind., is building an addition to its elevator.

John Spreng of Ashland, Ohio, has built a modern elevator on the A. & W. Railroad.

D. C. Keller has succeeded Keller & Dowell in the grain business at Bellefontaine, Ohio.

Taylor & Lawrence are reported to have sold out their grain business at Carrollton, Ohio.

Silver & Chenowith, grain dealers at Jefferson, Ohio, have been succeeded by M. A. Silver.

George Smith, miller and grain dealer at West Unity, Ohio, is reported to have sold his mill.

Serven & Hiscock, grain dealers, Montrose, Mich., have dissolved, A. E. Serven succeeding.

John P. Eversole has sold his grain business at Hebron, Ohio, and is reported seeking a new location.

E. E. Miller & Co. have repaired their grain elevator at Nova, Ohio, and have put in a concrete foundation.

John Holliday has bought the grain elevators at Cassville, Ind., and has placed his son, Glen Holliday, in charge.

Millikan Bros., proprietors of the elevator at Blountsville, Ohio, recently made a record for three days' business by buying and shipping 25,-

000 bushels of oats and 4,000 bushels of new wheat. The firm expects to handle 75,000 bushels of oats this season.

It is stated that the Grangers of Sandusky, Mich., are considering the advisability of going into the elevator business.

The Fremont Elevator Co.'s house at Berlin, Ohio, has been sold to Wolfe & Jones, who own the elevator at Vickery, Ohio.

W. C. Hawk of Mongo, Ind., has bought the elevator on the G. R. & I. at La Grange, Ind., formerly owned by Guy Harris.

N. A. Grabill, the contractor at Daleville, Ind., has sold one No. 2 U. S. Corn Sheller and two Constant Patent Chain Drags to the Berne Grain & Hay Co. of Berne, Ind.

T. McLane & Son have disposed of their grain business at Union Mills, Ind., to W. B. Loomis. The senior McLane will move to La Porte, where he has bought a residence.

O. E. Packard has improved his elevator at Chester, Mich., by adding machinery which will clean, elevate and load 500 bushels of wheat per hour. A 6-horsepower engine furnishes the power.

It is possible that the burned Page Elevator at Ionia, Mich., will be rebuilt. Vice-President Wann and Traffic Manager Patriarche of the Pere Marquette were at Ionia recently considering the proposition of rebuilding.

F. S. Lockwood, for the past five years in the elevator and coal business at Laingsburg, Mich., has sold out to McLaughlin, Ward & Co., and has bought the elevator and other interests of E. C. Astley & Co. at Portland, Mich.

The Farmers' Grain Co. of Markle, Ind., has been incorporated to operate grain elevators and buy and sell grain. The capital stock is \$7,700 and the directors are Douglas Lesh, Daniel W. Lesh, Clarence C. Haileich and Chester E. Wert.

#### IOWA.

The new elevator at Lester, Iowa, has been completed.

F. J. Semotan has bought the Greulich grain house at Bining, Iowa.

Dewing & Umphrey succeed C. H. Cooper & Son, grain dealers at Hancock, Iowa.

James H. Hood has been succeeded in the grain business at Hamlin, Iowa, by P. Nelson.

It is announced that work has been started on C. H. Wayne's elevator at Taylor Ridge, Iowa.

R. K. Johnson Co. succeeds to the elevator business of Snapp, Reid & Co., at Carson, Iowa.

The Grain Growers' Incorporated Co-operative Association has begun business at Sibley, Iowa, buying grain on track.

The J. H. Jordan Elevator at Algona, Iowa, has sold to the Plymouth Elevator Co. of Sioux Falls, S. D.

Fred Tauke has placed the contract for the erection of an elevator to replace the one burned recently at Avoca, Iowa.

The Trans-Mississippi Co. is tearing down the elevator at Sergeant Bluff, Iowa, and will build a new house on the site.

C. M. Gowdy is reported to have sold his grain elevator and business at Britt, Iowa, to the Farmers' Industrial Union Society.

The Logan Mill Co. of Logan, Iowa, has built a grain elevator as an addition to its flour mill on the Boyer River near Logan.

L. J. Cummings and P. S. Bannister have engaged in the grain, flour, feed and fuel business at Clinton, Iowa, under the style of Cummings & Co.

The Grain Growers' Incorporated Co-operative Association has so far been unable to secure a site for its proposed elevator on the C. R. I. & P. at Melvin, Iowa.

The Moville Lumber, Coal & Grain Co. of Moville, Iowa, has been incorporated with a capital stock of \$20,000. J. A. Molstead is president and R. J. Anderson secretary.

The Farmers' Grain Co. of Collins' Crossings, Iowa, has filed articles of incorporation. The capital stock is \$10,000 and O. S. Carpenter and A. L. Reagan are the incorporators.

The Iowa and Minnesota Cereal Co. of Minneapolis is said to be planning to move its headquarters to Fort Dodge, Iowa. The company's houses are mostly located on the Minneapolis & St. Louis and Iowa Central roads.

George A. Stibbens, former secretary of the Grain Dealers' National Association, and now in the grain business at Prescott, Iowa, has leased the elevator at Red Oak, Iowa, from Mr. Nation and will take possession October 2. Mr. Stibbens will move to Red Oak and look after the business

there himself, but will also continue the business at Prescott.

G. D. Montross, proprietors of the City Roller Mills at Sloan, Iowa, contemplates engaging in the grain business in connection with his mill.

The Farmers' Elevator Co. of Lake Park, Iowa, has published its articles of incorporation and is now doing business. The company failed to secure a site on the railroad right-of-way and has been compelled to erect two buildings to accommodate its business.

The Farmers' Elevator Co. of Rake, Iowa, has been incorporated with a capital stock of \$25,000. A. A. Rake is president and B. Quanne secretary. The company has been negotiating for the Way-Johnson-Lee Elevator at Rake, and if unsuccessful will buy grain on the track.

#### THE DAKOTAS.

Rumored that Riga, N. D., is to have another elevator.

Hart & Adler have completed their elevator at Volin, S. D.

T. I. Gunderson is building an elevator at Centerville, S. D.

The farmers' elevator at Great Bend, N. D., is taking in grain.

Reported that Godkin, N. D., is to have a 20,000-bushel elevator.

The farmers' elevator at Courtney, N. D., has been completed.

Work is under way on the third elevator at Buchanan, N. D.

The Thorpe Elevator Co. is building an elevator at Desam, N. D.

A new engine has been installed in the elevator at Gorman, N. D.

The new Van Dusen Elevator at Miller, S. D., has been completed.

The farmers' elevator at Litchfield, N. D., is practically completed.

The new farmers' elevator at Embden, N. D., is ready for business.

It is announced that a new elevator will be built at Cleveland, N. D.

The farmers' elevator at Petersburg, N. D., is in course of construction.

The Bingenheimer Lumber Co. is building an elevator at Mandan, N. D.

The contract for the new elevator at Montpelier, N. D., has been let.

The Thorpe Elevator Co. has commenced work on a new house at Jud, N. D.

The Osborn-McMillen Lumber Co. is building an elevator at Tolley, N. D.

A Minneapolis firm is building the farmers' elevator at Honeyford, N. D.

The McCaull-Webster Elevator Co. is building a new house at Rauville, S. D.

The Columbia flat house at Langford, S. D., is being converted into an elevator.

Work is under way on the elevator at Hetland, S. D., for the Eagle Roller Mill Co.

It is announced that the Lyons Elevator Co. will put up a house at Driscoll, N. D.

The old elevator at Edmunds, N. D., has been repaired and placed in first-class shape.

The Kenmare Farmers' Elevator Co. is building a 35,000-bushel house at Kenmare, N. D.

The rebuilding of the Acme Grain Co.'s elevator at Binford, N. D., has been completed.

It is announced that two elevators are being built at Alsen, N. D., a new town on the Soo.

The Guhin Elevator at Eureka, S. D., has been overhauled and put in first-class working order.

The contract for the erection of the farmers' elevator at Litchville, N. D., has been awarded.

Charles H. Baker has overhauled his elevator, wood yard and feed mill at Devil's Lake, N. D.

Work is under way on the new house of the St. Anthony and Dakota Elevator Co. at Ray, N. D.

It is announced that two new elevators will be built at Derrick, N. D., and three at Weaver, N. D.

The American Grain Co. of Salem, S. D., has built an engine house and installed a gasoline engine.

The Empire Elevator Co. has opened its flat house at Winship, N. D., with Casper Nygaard as buyer.

Two or three elevators are promised for the new town of Carbury between Bottineau and Souris, N. D.

George C. Harper of Minneapolis was at Minot, N. D., recently and a report from that town states that he intends building several elevators

at towns on the Towner branch of the Great Northern and also at points on the Soo extensions.

T. A. Cameron, who has built an elevator at Fairdale, N. D., has taken up his residence at that town.

The farmers' elevator at Petersburg, N. D., is nearing completion. This makes six houses for Petersburg.

A 6-horsepower gasoline engine has been installed by the Dakota Grain and Coal Co. at Salem, S. D.

Arbogast Bros. are said to contemplate building a 50,000-bushel annex to the Dakota Elevator at Alice, N. D.

The new 40,000-bushel elevator of Game & Calderville at Jamestown, N. D., is in course of construction.

A gasoline engine has been installed in the new elevator at Edmore, N. D., built by the Spaulding Co.

The Acme Elevator Co. has removed the elevator from the Gould farm near Buxton, N. D., to that town.

The contract for the erection of a 35,000-bushel elevator at Harvey, N. D., has been awarded by S. S. Renfrew.

Farmers at Neche, N. D., are reported to have subscribed over \$3,000 toward the erection of a co-operative house.

Lyman & Smith are raising the elevator on the flat house at Granville, N. D., and are making other improvements.

The farmers' elevator at New Richford, N. D., has been moved to a new location just north of the Dakota Elevator.

The Minneapolis & Northern Elevator at Milton, N. D., which was destroyed by fire last spring, is being rebuilt.

R. Wilson of Esmond has completed his new elevator at Cavour, S. D., which replaces the old Van Dusen flat house.

John Kelly, who bought the elevator and coal business of H. L. Dougherty at Britton, S. D., has taken charge of the business.

The Cargill Elevator Co. has completed an addition to its house at Dresden, N. D., and will carry a line of flour and feed.

The Mandan Co.'s elevator at Coleharbor, N. D., has been completed. The company is also erecting a house at Garrison, N. D.

The old farmers' elevator at Claremont, S. D., has been torn down and the Thorp Elevator Co. is erecting a new one on the site.

The recently incorporated farmers' elevator company at West Hope, N. D., will, it is stated, buy one of the line elevators at that place.

The annex to the Northwestern Elevator Co.'s house at Blanchard, N. D., has been torn down and will be moved to Portland Junction.

It is understood that the Great Northern has granted the farmers' elevator company of Granville, N. D., a site for its proposed house.

Upman and Bantry, N. D., will each have six elevators. Four are now under construction at Bantry and two are being erected at Upman.

The State elevator property at Mayville, N. D., is now owned by the Federal Elevator Co., which has placed A. L. Strauch in charge as agent.

The railroad company has granted the farmers' elevator company of Oriska, N. D., a site, and work has been commenced on a new elevator.

The Ashton Milling Co. has bought the Pierce Elevator at Ashton, S. D., and will remodel it, giving the house a capacity of 25,000 bushels.

A Mr. Henry, who is said to be building a line of elevators in that territory, expects to have his house at Calvin, N. D., completed at an early date.

Richard Hanson has taken the position of buyer for Mr. King of Utica, S. D., who recently bought the W. F. Lawrence Elevator at Yankton, S. D.

The material for the erection of the elevators at Gunthorpe, N. D., is on the ground, and they will be completed in time to handle this year's crop.

The Farmers' Mill and Grain Co. has improved its elevator at Milnor, N. D., by the installation of a new Fairbanks Hopper Scale and a new boot tank.

O. D. Weston has engaged in the grain business at Jamestown, N. D. He will buy and ship at the loading platform on the west side of the river.

The Farmers' Mill and Elevator Association of Devil's Lake, N. D., has bought the St. Anthony and Dakota Elevator on the Great Northern in that city. The annex, which is in itself a good-sized elevator, will be moved to the mill site on the farmers' road, elevator machinery will be installed and the annex will be converted into an

elevator. The old building and machinery at the present location will be repaired and both houses will be operated.

The Monarch Elevator Co. has thoroughly overhauled its house at Glover, N. D. The old power house has been torn down and an engine room built.

C. E. McGowan has sold his elevator business at Peever, S. D., to Sullivan Bros. of Sisseton. Gust Anderson, formerly of Corona, will act as buyer.

A. M. Beltz will be in charge of the new house that the Occident Elevator Co. is completing at Pingree, N. D. The town now has three elevators.

The Farmers' Elevator Co. of Hesper, N. D., has been incorporated, with a capital stock of \$25,000, by Fred A. Hill, Chas. L. Nordquist and others.

The Farmers' Elevator Co. of Hannaford, N. D., has been incorporated with a capital stock of \$20,000 by John B. Armstrong, Donald Campbell and others.

S. G. Simondson, formerly of Summit, S. D., but now of Minneapolis, contemplates building an elevator at Driscoll, N. D. He has a line of houses in the Northwest.

Classen, Braun & Co. are arranging for the erection of a 20,000-bushel grain elevator, to be run in connection with their implement business at Glenullin, N. D.

Hawkins & Goozee of Granville have begun work on their new elevator at Norwich, N. D. It is to occupy the old Stewart site between the Imperial and Acme elevators.

Articles of incorporation have been filed by the Berthold Farmers' Elevator Co. of Berthold, N. D. The capital stock is \$10,000 and the incorporators include W. H. Badger and S. S. Petry.

Work is under way on the new elevator of the Mandan Mercantile Co. at Mandan, N. D. The house will be located at the rear of the company's office on the railroad right-of-way.

The Monarch Elevator Co. is building a frame engine house in connection with its elevator at Minnewaukon, N. D., to replace the brick one which was destroyed by lightning recently.

The farmers' elevator at Bath, S. D., which was sold under mortgage a year ago and bought by some of the old stockholders, has been re-opened with a Mr. Ray of Andover as buyer.

J. P. Schaller has torn down the old power house on the south side of his elevator at Canistota, S. D., using the material for the erection of a feed mill on the north side of the house.

McEwan & Dougherty are building an elevator at Sarles, N. D. F. E. West, who has been agent at Park River for the St. Anthony and Dakota Elevator Co., will have charge of the new house.

The Farmers' Elevator Co., which will build a 30,000-bushel house at Russell, N. D., has been incorporated with a capital stock of \$10,000. The incorporators include C. F. Shong and C. F. Thorenson.

E. Blankenburg, who bought the McCarthy Elevator at Oakes, N. D., has made a number of improvements, including the addition of a new dump scale. C. E. Knox has been engaged as wheat buyer.

The Farmers' Elevator Co. of Donnybrook, N. D., has been incorporated with a capital stock of \$16,000 by J. C. Holbrook, Peter Botten and W. E. Freeman. The company will build a 30,000-bushel house.

At a recent meeting of the business men of Pierpont, S. D., a committee was appointed to investigate the matter of organizing a company for the purpose of operating an independent elevator at that place.

Frank E. Fee, formerly of Hartley, Iowa, has removed to Rolla, N. D., and will, it is stated, invest in a line of elevators in that part of North Dakota. He has already secured several sites on the farmers' railroad.

The five elevators at Mellette, N. D., are all in operation this season. R. Brunn is in charge of the Columbia; J. Baker at the Empire; H. Gota at the Crown; F. E. Harrington at the Whallon, and E. Waterbury at the Howe & Son.

The new Powers Elevator at Steele, N. D., has been completed. The house is 27x31 feet on the ground and 76 feet high. It contains six bins, 9x10x44 feet, and six bins, 6x9x34 feet. The feed bin is 6x9 feet and 34 feet deep. The capacity of the house is 35,000 bushels. A 9-horsepower oil-cooled Fairbanks Gasoline Engine supplies the power. The engine rests on a concrete foundation. The power house and office are in a separate building covered with steel siding. The scales are of the open beam type, visible from both sides, and are located in a roomy scale

house. J. W. Gonsallus will be in charge of the house for four months.

The new elevator of Gooze & Calkins at Deering, N. D., is nearly completed, and the work on the one at Norwich, N. D., is progressing satisfactorily.

James Carlon has transferred his elevator at Armour, S. D., to the Carlon Elevator Co. D. L. Beardsley will be associated with Mr. Carlon as equal partner in the new company, which controls five elevators, with headquarters at Armour.

The Imperial Elevator Co. has completed its lumber yard and sheds at Antler, N. D. This town is to have six, and possibly seven, elevators this fall. The lumber and construction crews for most of them are on the ground, but it will be impossible to have any of them completed in time to receive the first of the new crop. In order to handle this grain the railroad company has built a loading platform and the farmers will load their grain directly into the cars.

The grain firm of Tanton & Todd at Lakota, N. D., has been merged in the Farmers' Grain Co. The company is capitalized at \$100,000, and in addition to Messrs. Tanton and Todd the incorporators include a number of farmers living along the line of the farmers' railroad in Ramsey County, N. D. The company at present owns elevators located at Lakota, Lawton, Grand Harbor and Starkweather, and has under construction three others at Newville in Ramsey County, and Rock Lake and Crocus in Towner County, on the extension of the farmers' road. Contracts have also been let for the construction of three more, to be located at Webster, Garske and Sidney on the same road. The company expects to erect several others this fall, one of which will be at Olmsted and another in a new town site which has not yet been platted or named. A. G. Tanton will be general manager of the company, with headquarters at Lakota, and will have complete charge of all the elevators.

#### MISSOURI, KANSAS AND NEBRASKA.

The Farmers' Elevator Co. will erect a house at Beatrice, Neb.

The E. S. Allen Grain Co. succeeds Coleman & Allen at Hoberg, Mo.

The Benson Grain Co. is building a 20,000-bushel elevator at Wakefield, Neb.

Farmers have let the contract for a 20,000-bushel elevator at Pickrell, Neb.

The farmers' elevator at Miller, Neb., is reported to have been completed.

C. R. Fanatia of Shaw, Kan., has commenced the erection of a grain elevator.

The elevator of Van Wickle & Metzger at Rushville, Neb., is ready for business.

Thornton & Wilson, grain dealers of Green, Kan., are reported to have dissolved.

W. H. Miller is installing an Improved Hall Distributor in his elevator at Rexford, Kan.

Coontz & Walters, grain dealers at Vandalia, Mo., have been succeeded by Coontz & Heim.

R. M. Stewart & Sons are successors to R. M. Stewart in the grain business at Reserve, Kan.

The elevator at Dakota City, Neb., has been overhauled and a new foundation has been put in.

Railsback Bros. have purchased an improved Hall Distributor for their elevator at Memphis, Neb.

The Anchor Grain Co. has completed its new elevator at Hubbard, Neb., replacing the one torn down.

The Asherville Grain Co. of Asherville, Kan., has been incorporated with a capital stock of \$5,000.

The Torpin Grain Co. of Oakdale, Neb., is equipping its elevator with an Improved Hall Distributor.

The Farmers' Grain and Stock Co. has installed an Improved Hall Distributor in its elevator at Blue Hill, Neb.

The Hopkins-Goodell Co. of Crete, Neb., has disposed of its elevator and grain business to the Bartling Grain Co., Nebraska City, Neb.

Miller & Co., grain dealers of Smith Center, Kan., have been succeeded by H. R. Sheldon, formerly in the grain business at Kensington.

The Rock Milling Co. is reported to have sold its grain interests at Greensburg, Kan., to a Mr. Huff of Pratt, who has engaged J. M. Clark as buyer.

The McDaniel Milling Co. is building a large warehouse at Carthage, Mo. The company will do a wholesale and retail business in flour as well as buy grain.

The concrete foundations for the Robb-Bort Elevator at Wichita, Kan., have been completed and work on the steel tanks is now in progress. The

foundations are 10 feet below the ground and 7 feet above. The house will have a capacity of 75,000 bushels.

The material for the Nye-Schneider Co.'s new elevator at O'Neill, Neb., is on the ground. When the house is completed the town will have two modern elevators.

Milliken-Holm Commission Co., St. Louis, Mo., has bought the Rogers Elevator and has asked the directors of the Merchants' Exchange to make the house regular.

The Farmers' Grain and Live Stock Co. of Bloomfield, Neb., has been incorporated with a capital stock of \$25,000 by J. F. Kintz, Charles Cracht and others.

Norcross Bros., who recently purchased the grain business of W. N. Spellman at Beatrice, Neb., are building an addition to their elevator and making other improvements.

The Schilling Grain Co. of Kansas City, Mo., has filed articles of incorporation, with a capital stock of \$10,000, all paid. Henry J. Nora, Minnie and Anna Schilling are the incorporators.

L. C. Calkins & Co. have bought the Bloomfield Elevator at Bloomfield, Neb., from A. C. Carroll of Jackson. It is stated that the latter will go to Minneapolis and engage in the grain business.

The Southwestern Grain Co. expects to build a large elevator, feed mill and cleaning plant at Arkansas City, Kan. The company is composed of C. C. Straughan, E. C. Parker and H. L. Hastings.

The Purcell Elevator Co.'s new house at Purcell, Mo., has been completed. The power is furnished by a gasoline engine. Mr. Hubbard, formerly of the Quaker Milling Co., has charge of the grain buying.

The Farmers' Grain and Elevator Co., which recently succeeded Siener, Frank & Woerst Grain Co. at Hermann, Mo., has been chartered with a capital stock of \$10,000. The incorporators are Victor A. Siener, Ed Kemper, R. C. Schaumberg and others.

It is stated that the elevator of the Cloud County Grain Co. at Concordia, Kan., which was destroyed by fire recently, will be replaced with a new and larger house. The new structure will be completed within 60 days. It will have a capacity of 25,000 bushels and will be capable of handling 25 cars a day.

The new mill and elevator of the Rock Island Grain Co. at Hutchinson, Kan., have been completed. The elevator has a capacity of about 75,000 bushels and is one of the best equipped grain handling plants in that portion of the state. A complete corn grinding plant has been installed and the company will make fine meal and corn chop.

The Imboden Milling Co. of Wichita has completed a large steel tank for grain storage. The tank is 40 feet in diameter and 53 feet high and has a capacity of 40,000 bushels. It will be used for reserve storage and is connected with the elevator by a conveyor at the top. There are seven separate bins and an underground conveyor enables the operators to take wheat from any desired bin and convey it to the mill and elevator.

The Farmers' Independent Grain Dealers' Association of Preston, Kan., has asked the state railroad commission to compel the Missouri Pacific to build a spur track to the farmers' elevator at Preston. The railroad refuses to build the spur unless the Association puts up a bond and agrees to ship all its grain over the Missouri Pacific. The Association is willing to pay for the spur after it leaves the right-of-way, but objects to giving a bond.

The Von Dorn Grain Co., successors to the George A. Adams Grain Co. of Omaha, Neb., will build a 50,000-bushel elevator at Council Bluffs. Plans have been made and the house will be erected this fall. It will have an extra large handling capacity for its size. The Von Dorn Grain Co. was formerly the George A. Adams Grain Co., of which George A. Adams of Kansas City was president and J. E. Von Dorn of Omaha vice-president. The latter is now owner of the Omaha business and has given up his interests in the company's business at Kansas City and other places.

The old Rock Island Elevator, near the Seventh Street viaduct in Armourdale (Kansas City), Kan., which was recently purchased by Bartlett, Frazier & Carrington of Chicago, has been moved to a new location, 120 feet west. Although the way was uphill, the job was accomplished successfully and the structure was placed in position at its new location on Mill Street without mishap. While the elevator was being moved a gang of millwrights were at work in it, placing machinery. Hereafter the house will be run by electricity, and it is claimed that it will be the only electrical elevator in the Southwest. One 55-horse-

power, one 50-horsepower, three 15-horsepower and two 10-horsepower dynamos have been placed in position. A novel feature of the removal was the fact that the telephone in the elevator was kept in use while the structure was in motion. The wires were so arranged that as fast as the house was moved they were lengthened.

Articles of incorporation have been filed by the Stevens-Scott Grain Co. of Wichita, Kan., with a capital stock of \$75,000. The officers are W. L. Scott, president; A. S. Barr, vice-president; W. J. Stevens, secretary and manager; C. A. Baldwin, assistant secretary; W. M. Camness, treasurer. The directors are W. L. Scott, A. S. Barr, W. J. Stevens, J. E. Scott and C. A. Baldwin. The company has been in business at Wichita for about three years and controls several elevators in Kansas and Oklahoma. It now has under construction new houses at Cairo, Kan., Uncas, Okla., and Broken Arrow, I. T.

The directors of the Independent Elevator Co. have decided to operate their new 1,000,000-bushel house at Omaha, Neb., as a public elevator. The original plan was to operate the elevator under a company to be known as the Home Market Grain Co. and capitalized at \$500,000. Articles of incorporation had been drawn, but the plan was dropped. The Great Western, which owns the controlling interest, will operate the house in the interests of Omaha and Nebraska grain men. It is stated that all will fare alike at the new elevator, no matter whether the shipment handled is one car or 100 cars.

#### CANADIAN.

A 30,000-bushel elevator is being erected at Ponoka, N. W. T.

A 28,000-bushel elevator is in course of erection at Grandview, Man.

Work has been started on the Western Elevator at Heward, N. W. T.

The three elevators at Elm Creek, Man., are ready to receive grain.

The Estevan Grain Co. is building a 30,000-bushel elevator at Bimfai, Man.

The Brant Milling Co. will rebuild its burned elevator at Brantford, Ont.

Senator Perley is building a 25,000-bushel elevator at Wolseley, N. W. T.

The Canadian Elevator Co. is building a 25,000-bushel house at Girvin, Assa.

James Mack of Prince Albert, N. W. T., will build a mill and elevator at Bonda.

Reported that the Dowd Milling Co. is building an elevator at Fox Warren, Man.

The Griswold Milling Co. is building a 65,000-bushel elevator at Griswold, Man.

Andrew McNabb, flour, feed, etc., at Osage, Sask., has gone out of business.

The flour and feed firm of Shotbolt & Horne, Victoria, B. C., has been dissolved.

Reported that Hall-McNabb & Co. of Winnipeg, will build an elevator at Red Deer, Assa.

It is reported that the Anglo Canadian Elevator Co. will build a house at Mortlach, Assa.

The Western Canada Flour Mills Co. has completed its new elevator at Somerset, Man.

Scott & Rainforth, flour and feed merchants of Lacombe, Man., have dissolved partnership.

The Calgary Milling Co., Calgary, Alta., has let the contract for its new 150,000-bushel elevator.

The Great Northern Elevator at Quebec was overhauled prior to beginning work on new crop grain.

D. J. McBride, a grain merchant of Lawrence Station, Ont., has been succeeded by A. C. Campbell.

The Western Milling Co. of Calgary, Alta., has erected a 20,000-bushel elevator near Macleod, Alta.

The Medicine Hat Milling Co. of Medicine Hat, N. W. T., will, it is reported, build a 50,000-bushel elevator.

The Peterborough Cereal Co., Peterborough, Ont., will build a 70,000-bushel grain elevator at that point.

Furtney & Oliver of Flesherton, Ont., have leased the grain elevator of F. A. Metcalf at Buford, Ont.

The Estevan Lumber Co. has completed arrangements for the erection of a 25,000-bushel elevator at Estevan, Man.

The Alberta Pacific Grain Co. has awarded the contract for the erection of its elevators at Raldy and Cardston, Alta.

The Goderich Elevator & Transit Co. is rebuilding its elevator at Goderich, Ont. S. H. Tromanhauser of Minneapolis has the contract.

Baslar & Neelands of Hamiota, Man., have placed stone foundations under the two elevators in connection with their mill. It is their inten-

tion to have an unloading platform built at each elevator and to have both equipped with all modern improvements.

The Western Canada Milling Co. of Montreal has placed its contracts with James Stewart & Co., Chicago, for the erection of its large mill and elevator.

The two new elevators at Hanley, N. W. T., are nearly completed. They will bring up the grain storage at this point to between 75,000 and 80,000 bushels.

The Winnipeg Elevator Co. has placed a dump scale in its elevator at Plum Coulee, Man. The International Elevator Co. has repaired its house at this point.

It is stated that one or more elevators will probably be built at Bethune, N. W. T., in time for the crop of 1906. This year's crop is being loaded on the track by the growers.

The Nanton Lumber & Grain Co. will erect a 30,000-bushel grain warehouse at Nanton, N. W. T. At one time the company intended to build an elevator, but the plans were changed.

The Canadian Elevator Co. and the Wells Land & Cattle Co. are building new elevators at Davidson, N. W. T. The house of the latter company will have a capacity of 30,000 bushels.

Two new elevators are to be erected at Wetaskiwin, Man. One will be built by the Alberta Pacific Grain Co., and the other by the Western Milling Co., Ltd. This will give the town six large elevators.

F. J. French, K. C., secretary of the Prescott Terminal Co., Prescott, Ont., is authority for the statement that the company will fit up the elevator at that place and put it in operation. The elevator was erected in 1895 and for two or three years was in active operation, but for the past six years has been idle. A short time ago it was sold under the hammer to the present owners.

At a recent meeting of the Rosser Grain Growers' Association of Rosser, Man., a resolution was passed, asking the C. P. R. to erect a second loading platform at this station, and another resolution was passed condemning the C. M. R. for not responding to a petition for a loading platform at Grosse Isle on the Oakshella branch. Both are urgently required for moving this year's wheat crop.

The work of installing machinery in the new elevator of Muirhead & Co. at Fort William has been completed and the house is now in operation. The elevator is equipped with all modern improvements and also has choppers which will chop and mix a carload of grain in ten hours. With the elevator proper there is a large flour shed 50x75 feet. Six men are employed in the plant at present and it will probably be necessary to increase this force in the near future.

#### WESTERN.

Sargent & Polick is the style of a new grain firm at Asotin, Wash.

J. B. Hattrup has engaged in the grain business at Uniontown, Ore.

Reported that A. Simon, a grain dealer of Berkeley, Cal., will sell out.

The contract for the erection of an elevator at Fromberg, Mont., for the A. L. Babcock Co. has been awarded.

Work is now in progress on the 50,000-bushel wheat elevator at Eureka, Mont., for the Kalispell Flour Mill Co.

The Colorado Milling & Elevator Co. has about completed a 50,000-bushel elevator at Romeo, Colo. It is a modern house in every respect.

The Bozeman Elevator Co. is building a 75,000-bushel elevator at Bozeman, Mont. It will be a wood structure covered with corrugated iron.

The Grand Ronde Grain Co. of Island City, Ore., has been incorporated with a capital stock of \$6,000 by E. E. Kiddle, Fred H. Kiddle and F. A. Bidwell.

The Stevens-Sweetman Mercantile & Lumber Co. will build a 25,000-bushel elevator at Mondak, Mont. The house will be located on the railroad right-of-way and will be equipped with modern facilities.

The Seattle Grain Co. is at work on an addition to its warehouse at Lind, Wash. The addition will be 70 feet long. The warehousemen at this point expect to handle one of the biggest crops in the history of the station.

The Centennial Mill Co., of which Moritz Thomson of Seattle, Wash., is president, has closed a deal whereby it becomes owner of three-fifths of the stock of the Tacoma Grain Co., including its forty elevators on the Northern Pacific Railroad between Tacoma and Spokane, the new flour mill at Tacoma and the big elevator in that city known as Elevator "A." The stock sold is that owned by Frank Cardin, president of the company, and John T. Bibb, general manager.

The former retires, while Mr. Bibb is to continue as Tacoma manager for the company. The purchase price for the stock is said to have been \$300,000. The remainder of the stock in the Tacoma Grain Co. is held by Tacoma parties and the company will be operated independent of the Centennial Mill Co., but on a friendly basis.

## COMMISSION

E. W. Higgins of the Armour Grain Co. has returned to Chicago from Europe.

The Edwards-Wood Co. of St. Paul has resigned its firm membership in the Duluth Board of Trade.

"Andy" Kuhl, representing G. A. Hax & Co., Baltimore, was a Chicago visitor during the first week of September.

Jack Mackenzie of Kneeland, Clement & Curtis has returned to Chicago after five weeks in the White Mountains.

Walter Fitch, prominent in commission circles and vice-president of the Chicago Board of Trade, is back from Colorado.

Daniel McCaffrey's Sons Co., Pittsburg, Pa., are again located at 716-718 Fifth Avenue, where they were burned out last June.

The A. J. Cummings Grain Commission Co. has connected its offices at Sioux Falls and Yankton, S. D., with a private telegraph line.

H. J. Stevens has opened an office at 126 Board of Trade, Montreal, where he will do a commission business in grain, flour, feed, etc.

Randall, Gee & Mitchell, a grain commission firm of Duluth and Minneapolis, have appointed C. G. Spencer representative at Winnipeg, with offices in the Henderson Block.

The W. J. Armstrong Co. of Milwaukee, Wis., entertained a large number of their customers at the Wisconsin State Fair, which was held in that city September 11 to 15.

The Henderson Grain Co. of Minneapolis has incorporated with a capital stock of \$25,000. Robert J. Henderson, Iona M. Henderson and Minnie P. Martyn are the incorporators.

The incorporation of the Bright-Coy Commission Co. of East St. Louis, Ill., has been recorded. The capital stock is \$15,000 and the incorporators are W. A. Bright, George P. Coy and George W. Doerr.

A. T. Hepworth, secretary of the Consolidated Elevator Co. at Duluth, Minn., has resigned to accept an important position at Winnipeg with one of the large Canadian milling and grain companies.

E. W. Wagner, the well-known commission man and director of the Chicago Board of Trade, has recovered from his long illness and is again on 'Change. His many friends in the trade will be glad to learn of his recovery.

Edwin W. Stuhr, son of D. H. Stuhr, a grain dealer at Davenport, Iowa, has taken a position with the Barnum Grain Co. of Minneapolis in the sample department. He will devote his attention to the sale of barley by sample.

Articles of incorporation have been filed by the Burns Grain Co. of Omaha, Neb., Wm. B. Burns, John J. Bartlett, Edward M. Martin and L. W. Burns being the incorporators. Wm. B. Burns is the president. The company has opened offices in the Board of Trade Building.

The Harris-Scotten Co. have taken over the Iowa Elevator at Sixteenth Street and the river, Chicago, and will use it as a cleaning house in place of the Santa Fe Elevator, which burned September 9. The house has a capacity of 1,500,000 bushels and has been idle for some time.

The commission firm of L. Bartlett & Son Co., Milwaukee, Wis., has been reorganized, O. Z. Bartlett selling his interest to the other members of the firm. Bert G. Ellsworth succeeds Mr. Bartlett as president, the other officers being H. H. Peterson, vice-president, and E. H. Heimke, secretary. Mr. O. Z. Bartlett will look after the affairs of his father, L. Bartlett, who has a large grain business. The latter is over 60 years of age but is still active.

Frank A. Hyke of Windom, Minn., has brought an attachment suit against the Edwards-Wood Co. of St. Paul to secure a claim for \$72,284.60. He claims that as the amount he gave the firm between September 1, 1901, and May 1, 1905. He charges fraudulent practices, and says that defendant did not trade on his account through Minneapolis and Chicago exchanges, and did not deposit the money for his own security, but "bucketed" and devoted the money to their own use. Sheriff Miesen attached thirty-four pieces of real estate in the country and a mortgage of \$2,000, and has also attached the account of defendants in the

St. Paul National Bank. Attachment has been made in other counties by plaintiff.

The Chicago commission firm of Geddes & Hatley has been dissolved by the retirement of John Geddes, who will devote his entire time to his interests at Winnipeg, Man. The retiring partner's interest has been purchased by C. F. Hatley and the style of the new firm is Furness, Hatley & Co.

The Calumet & Western Elevator Co., with offices in the Royal Insurance Building, Chicago, and branches at Minneapolis, St. Louis and other points, transferred its trades to Crighton & Co. on August 15. At that time it was stated that the house had sustained some heavy losses through one of its outside connections. Later the company resumed business, the Corn Exchange National Bank of Chicago and the Bank of Montreal coming to the rescue.

### CHANGING GRADE RULES IN MINNESOTA.

The Minnesota State Board of Grain Appeals met on September 1 and made a few changes in the grading rules for the new crop. These are summarized by the daily press as follows (official copies of the changes not having as yet reached this office):

The first discriminates against scoured or manipulated wheat, which may be raised several pounds to the bushel by scouring or otherwise removing the chaff and "whiskers." The new rule reads: "Wheat scoured or otherwise manipulated will not be considered in grading same."

Another change is that relating to the pouring of grain into test kettles. It has been found that grain poured into the middle of the kettle is heavier than when poured against the sides. The new rule therefore is: "Manner of testing wheat, flax, barley and rye shall be tested after it is cleaned. The test kettle shall be placed where it cannot be jarred or shaken. From scoop, bag or pan hold two inches from top of kettle, pour into middle of same at moderate speed until running over, striking off in a zigzag manner with the edge of beam held horizontal."

A rule concerning rye provides that hereafter rye must be tested after it has been cleaned, instead of before cleaning.

Rejected spring wheat is done away with and made No. 4, making now six grades in all.

No. 1 rye is advanced from 55 to 56 pounds, and No. 2 from 52 to 54, leaving it still one pound below the Wisconsin inspection, an advantage for the Minnesota department.

No change was made in the standard on flax, although requests were filed, as the present standard was deemed satisfactory.

To stop the practice of mixing dirt with barley by Eastern agents after it left Minnesota inspection, the rule regarding feed barley is changed to read as follows: "Feed Barley—No. 1 feed barley must test not less than forty pounds to the measured bushel, and be reasonably sound and clean. No. 2 feed barley shall include all barley which is for any cause unfit for the grade of No. 1."

Inspectors of grain at terminal markets have not as yet seen sufficient wheat to permit of judging just how the various grades will line up, says the Duluth Commercial Record. It is quite certain, however, that there will be a good deal of smut, and no smut of any kind will be permitted in the No. 1 Northern, and very little into the No. 2. If the smut kernels are hard, unbroken and few in number, and the wheat is otherwise fit for No. 2 or better grade, the inspector will undoubtedly call it No. 2. But if smut bolls are broken and the good grain painted or discolored, it will go into Nos. 3 and 4, depending on the degree of paint and character of grain.

### "PLAIN GAS ENGINE SENSE."

This is the title of a little book of 125 pages or more, by E. L. Osborne, explanatory of the gas engine in theory and practice. It has been prepared more particularly for the beginner in the use of this type of engine and is thoroughly practical, but free from abstruse technicalities. A somewhat hasty glance through it induces the belief that it will be found just the kind of a manual that thousands of gas and gasoline engine operators, who are not experts, need to familiarize themselves with this exceedingly useful but sometimes apparently erratic machine, especially when in the hands of the inexpert or imperfectly informed operator. Sold by this office or by the publishers, the Gas Power Publishing Co., St. Joseph, Mich., for 50 cents per copy.

The first lot of this year's Carolina grown rice reached Charleston on September 2.

## THE EXCHANGES

Elevator "A," of the Milwaukee road, has been made regular for the storage of grain by the Milwaukee Chamber of Commerce.

Herman Deutsch, Max Hattelet, P. C. Kamm, Chas. Kraus and Francis Duehne represented the Milwaukee Chamber of Commerce at the recent reciprocity convention in Chicago.

The New Orleans Board of Trade has compiled a booklet of statistics covering the movement of rice and showing the position of New Orleans as the commercial center of the rice industry.

The directors of the Omaha Grain Exchange have appointed an additional assistant grain inspector, the rapid growth of the business of the exchange rendering this action necessary.

The following, all of Milwaukee, have been admitted to membership in the Milwaukee Chamber of Commerce: Frank J. Coughlin, Edwin Ehlert, Leonard J. Keefer and Edward H. Heimke.

The directors of the Milwaukee Chamber of Commerce have extended the operation of the rule against the buying by members of grain at railway stations at a price equivalent to more than the current market price by substituting for the words "for delivery at Milwaukee" the words "on the basis of Milwaukee markets."

Chicago warehouse receipts are no longer deliverable on contracts at Omaha, the directors of the Omaha Grain Exchange having voted to repeal the amendment of December 5, 1904, by which these receipts were made deliverable. The rules and regulations of the exchange have also been changed to allow the delivery of No. 3 corn on contracts at a penalty of 5 cents per bushel.

A Minneapolis Chamber of Commerce membership changed hands recently at \$4,450, establishing a new high record. Fred M. McCord, of the American Cereal Co., who held two certificates, was the seller and C. F. Clement, treasurer of the Soo road, was the purchaser. Some months ago it was predicted that \$5,000 would be reached this season if the northwest wheat crop turned out well, but the advance was not expected to begin until later in the season, when the movement of new grain to market will run heavy.

A general meeting of the Winnipeg Grain Exchange was held on August 30, at which time the by-laws were amended, making the membership fee \$2,500 instead of \$1,500. The meeting was for members only, but the move to advance the price of membership seems to have been popular, and the amendment was put through with considerable enthusiasm. Mr. Clarke, superintendent of the seed grain division of the Department of Agriculture, Ottawa, addressed the meeting for a few minutes on the nature of the work being done by his division.

The rules committee of the Milwaukee Chamber of Commerce has recommended an amendment to the rule on brokerage charges by which it is hoped to extend the brokerage business between members of the Chamber and those of the Chicago Board of Trade. The old rule provided for brokerage business between members of the Milwaukee Chamber of Commerce at a minimum charge on the purchase and sale of cash grain of not less than  $\frac{1}{2}$  cent per bushel. The changes in this rule will permit the same brokerage rate in dealing with members of the Chicago Board of Trade, providing cars are bought for forwarding to Chicago.

### CINCINNATI EXCHANGE ON CROP REPORTS.

The Cincinnati Chamber of Commerce, by unanimous vote of its board of directors on September 5, adopted the following:

Whereas, The Cincinnati Chamber of Commerce by action on August 3 opposed the proposed change in time of issuing the monthly crop report of the Department of Agriculture, for reasons stated, which action was duly transmitted to the honorable secretary of agriculture; and

Whereas, In making acknowledgment to such action the assistant secretary of agriculture has invited further consideration of questions introduced in connection with the proposition to make such change; and

Whereas, The department's report for August was issued within the time of the active session of prominent exchanges, without evidence of benefit thereby to the general range of interests and localities concerned in such information, but was attended with decided evidences of disturbing influences of a temporary nature prejudicial to the interests of producers of and dealers in actual commodities; therefore

Resolved, That the Cincinnati Chamber of Com-

merce in the light of the later review of the situation finds no occasion for favoring the proposed change in time of issuing the monthly crop reports, but on the contrary is strengthened in the view that it would be seriously unwise to inaugurate such a change, and respectfully urges that no change from the time heretofore adopted be made.

### CHANGES AT BALTIMORE.

At the August meeting of the directors of the Baltimore Chamber of Commerce an amendment to the by-laws changing the date of fixing the rates for the inspection of grain from the September meeting to the August meeting was adopted and the rates for the ensuing year were made. The inward inspection to elevators will be 50 cents per 1,000 bushels or part thereof, and the outward inspection 30 cents per 1,000 bushels or part thereof, whether to vessels or cars.

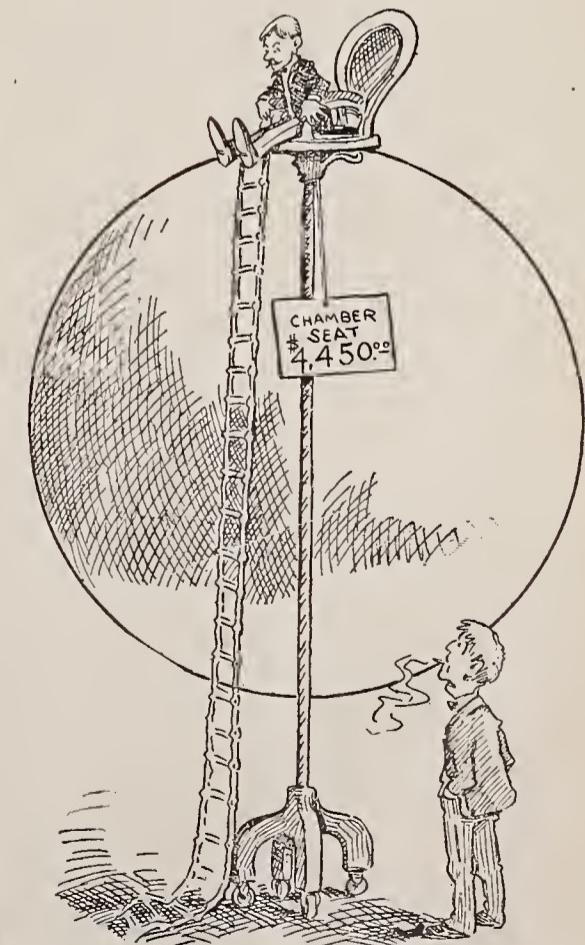
Messrs. Harry Waters Atkinson and Ellsworth Armacost, applicants for membership, being approved by the committee, were duly elected to the Chamber.

The committee on grain differentials submitted a final report and requested to be discharged. The board adopted a resolution discharging the committee and at the same time thanking its members for the successful manner in which its duties had been performed. The members of the differentials committee were Messrs. Robert Ramsay, chairman; Blanchard Randall, Charles England, John M. Dennis, James A. Clark and George T. Gambrill.

### HOW TO ORDER TRANSMISSION ROPE.

A writer in Power of recent date closes an interesting technical article on the manufacture and proper qualities of good rope for the transmission of power, by making the following suggestions:

The reader, if he has perused this article to the present point, is doubtless now asking himself. "How shall I word my order when I want a first-class driving rope?" The safest road to follow is to write to some manufacturer or firm whom you know to be reliable, and ask for so many feet of their transmission rope, giving the name, if you are certain on that point, and, of course, being sure to mention the diameter. In case you do not know the name of his rope, word your order as simply and briefly as possible; for example: "One thousand feet 1 $\frac{1}{2}$  inches diameter first quality manila transmission rope;" and, if the concern to which you write is a reputable one, you will receive a four-strand rope, made from Zebu manila hemp, put together with proper twist and lay for the service required."



AND GOING UP?

Note.—A seat on the Minneapolis Chamber of Commerce sold on August 21 for \$4,450.—Minneapolis Journal.

## HAY AND STRAW

Young Bros., wholesale hay dealers at Bartlesville, I. T., have been succeeded by C. D. Young.

Hartell & Martin have built a hay and grain warehouse on the Grand Trunk at Potterville, Mich.

Advices from Lincoln state that the Nebraska hay crop will be very large this year, and the western counties will lead in the production.

The Alma Alfalfa Milling Co. has been incorporated at Kansas City, Mo., with a capital stock of \$20,000, by Wilber Warren, A. H. Curtis and E. B. Bruce.

Robert McGinnis, of the Northwestern, with headquarters at Lincoln, states that the hay crop in western Nebraska this year will exceed that of the last several years by at least 50 per cent.

The hay and grain sheds of F. W. Sawtelle & Co. at Readville, Mass., were damaged by fire on August 19. The loss is estimated at between \$12,000 and \$15,000, covered by insurance. The buildings were modern structures, one to three stories in height.

According to the Montreal Trade Bulletin, about 100,000 bales of Canadian hay have been placed for export by the way of Boston and New York, at freight rates ranging from 10s. 0d. to 11s. 3d. and 12s. 6d. for September shipment. This is understood to be all for Liverpool. Of the above, 60,000 bales will go by the way of New York and 40,000 by the way of Boston.

There is said to be a scarcity of hay in the principal markets of the Northwest already, and it is expected that there will be an unusual shortage the coming winter. Where the early crop was a total failure it is possible there may be some late cutting. Superior, Wis., is feeling the effects of the shortage and dealers are unable to fill their orders.

The hay press, feed mill and coal yard of Sylvester Clouse at Parkerford, Pa., were totally destroyed by fire on August 22. The fire, which is supposed to have started from an overheated journal, spread with great rapidity to the baled hay on the upper floor of the mill and in a short time the large two-story frame building was in ruins. The loss is about \$6,000 and is covered by insurance. The Clouse Mill was formerly known as the Landis Mill.

The hay crop of north central Minnesota will, it is stated, be comparatively small this year. Owing to continued rains, most of the meadows are badly flooded and little effort was made to cut the crop up to the first of the month. The precipitation in north central Minnesota has been greater than for several years and inasmuch as there are practically no hay lands except low meadows of wild grass, most of the hay used in the lumber camps this season will have to be shipped in.

The Fruit and Produce News, New York, says: "The general impression is the price of hay during September will not vary much, although railroads are claiming a scarcity of cars. This scarcity usually occurs in September, but this year it seems to have started in early in the season. The principal amount of hay on the market is old stock. There is not enough new to make a market. The best new brings \$15 to \$16. Some stock is coming down in barges, but the principal arrivals are at the terminals, and there is no embargo; so the trade is in full swing."

The hay sheds of the Franklin L. Lewi Co., Newark, N. J., are practically completed and hay shipments are being taken care of in them. The firm is a comparatively new one in the trade, although its president, Franklin L. Lewi, is well known. The past year has shown a healthy growth in the business and the new sheds have been built to meet expanding requirements. Hay shed privileges give the same advantages as the markets of Greater New York, but the undesirable car service charges are eliminated, as the Lewi Hay Sheds is a private concern.

The hay crop of Great Britain has been harvested in fairly good condition, according to information received by cable by the Montreal Trade Bulletin, but there is about 25 per cent below an average yield. To compensate for this, however, it is understood that the farmers have on hand about 25 per cent of the old crop. In reviewing the situation the Bulletin says: "Canada has unquestionably a large crop already harvested, a considerable portion of which is well saved. Of course a certain percentage is stained by rain, but this occurs to a greater or less extent every season. The United States has also a fairly good crop and prices in New York are so low that it will not pay to ship to that market. The outlook,

therefore, is not for higher prices, but rather the reverse. There is quite a lot of old hay still in farmers' hands, the quantity in some districts being 20 to 25 per cent."

J. D. Bartlett & Co. have sold their grain business and hay transfer house at Jackson, Mich., to Leighton & Holden of that city. The latter firm has been in the hay shipping business for several years and the business has developed to such an extent as to require larger quarters.

According to the state crop report, haying has made favorable progress in Montana. Wild hay and second crop alfalfa are nearly all harvested. The value of the hay crop in this state is greater than that of all other agricultural products put together. Last year the hay crop was valued at \$6,149,036, which was \$481,948 more than the value of all other crops. Oats came next, but a long way behind, with a value of \$1,836,565. Hay fields occupy 335,558 acres of Montana's surface, with an average of 2 1-10 tons to the acre and an average of \$8.81 per ton on the farm.

Walter Ker, of the Brackman-Ker Milling Co., Vancouver, is enthusiastic over the hay crop in British Columbia. He says: "It will surpass last year's in quantity, but the farmers have been handicapped owing to the scarcity of labor. The yield this season, especially of timothy, is very abundant on Lulu Island and in the vicinity of Ladner. Hay is quoted at \$10 per ton delivered at the steamboat landings. This is not excessive. I have seen it sell for \$20 a ton. I don't anticipate any advance in prices unless the railway construction now in progress in the interior results in an increased demand and a consequent shortage of the local supply. Various and unexpected factors sometimes affect the quotations quite unexpectedly. Practically all the hay consumed in Vancouver is grown hereabout. A light crop is reported from Vancouver island, owing to the recent dry spell there. We anticipate inquiries from Victoria, as many of the farmers on the island are going in for stock raising. The market in Dawson and the Yukon generally naturally belongs to us, but the Americans have captured it. There is no difference in the quality of American and Canadian hay. However, our timothy and clover, owing to frequent rains, is not as bright looking as the American article, for which the Yukon people show a decided preference."

F. Williams, the New York hay commission man, has spent considerable time the past few months traveling through sections tributary to the Eastern markets, returning early in September. His report on general conditions and the prospects is given in the following extract:

"Through correspondence received and personal visits in many sections we figure that the crop in the principal states tributary to Eastern markets (New York, Pennsylvania, Vermont, Ohio, Michigan and Indiana) is a full average crop, larger than a year ago in many sections of the West.

"The quality will not average as good as last year, there being a heavy growth of clover mixed and clover hay in many sections of Ohio, Michigan and Western New York, whereas clover was light a year ago. Rainy weather prevented a satisfactory harvest in many sections.

"Judging by these general conditions shippers should be cautious about buying low grades of hay, including clover, clover mixed and weedy hay. This class of stock should be secured at very low figures; better grades should also be secured at moderate figures. We believe the farmers that realize the true conditions, namely, that there is a large crop of hay throughout the country, and are willing to accept reasonable figures for their goods will be acting wisely.

"About the first of August old hay was cleaned up closely in our market, and the result was prices advanced; but since that time there has been a gradual weakening owing to increased receipts. From now on there will be very little old hay forwarded, as it is all practically shipped out.

"Present prices for old hay ranging from \$11 for shipping hay to \$16 to \$17 for No. 1.

"New hay has been arriving more freely during this week, most of it in good condition, and it is now meeting with ready sale. It will only be a short time before all the old hay will be sold up and only new for sale on the market. We have disposed of considerable this week for \$14 to \$16 per ton for timothy. However, the market has not been established on new hay as yet. Prices may go lower than they are at the present time."

### HAY INSPECTION AT ST. LOUIS.

The new hay inspection law has just gone into effect and the first inspections under it in St. Louis were made on September 6. Two new inspectors have been appointed for this department. The places were given to James C. Baird and John Johns, on recommendations from the St. Louis Hay Receivers' Association. The Association put up a fight against the law when the bill was before the

legislature last winter, but the opposition has been withdrawn and the co-operation of the Association extended to the inspection bureau. At Kansas City, however, the local association is still fighting the inspection. A charge of 50 cents a car is made.

### NEW ORLEANS HAY MARKET.

Receipts of hay at New Orleans, La., at the close of last week were heavy. Stocks were 360 cars, with 100 placed on track. Choice timothy was in good demand at \$15 to \$15.50 a ton, No. 1 timothy firm at \$13 to \$14 and No. 2 timothy slow at \$11 to \$12.50. Choice clover mixed was active at \$11.50 to \$12.50.

### CUTTING TIMOTHY WITH A BINDER.

A North Dakota farmer writes to Orange Judd Farmer that, following the example of a neighbor, he this season cut timothy hay with a binder. He had 160 acres and when it was ready to cut, he put on six binders and followed these with shockers. It took about a day and a half to cut the field and put it in shock, ten bundles in each. The hay was left in straight bundles and was very nice to handle. He says he could get about three times more in the barn than when put in in the old way and requires less help in handling. It will cure in about eight days and can then be stored in a barn or small round stacks out of doors. Hay keeps very well.

### A TESTER FOR HAY INSPECTION.

Almost any day at the Northeastern Terminal at New Orleans a visitor may see a hay retailer, in looking over a car of hay, select a certain bale and plunge into it a conical shaped hollow iron plug, open at the top, and with a smaller opening located above the point. Putting his nose close to the large end he takes a long, careful smell. If the smell is sweet he is satisfied; but if not, he will either reject the bale or insist on a shaved price on the entire car.

Most hay is sold by its general appearance and the color of the bales, taking into consideration whether or not it "smells sweet." When a car is sold by sample on an exchange floor, the smell is quite a factor in the purchase. If a bale is badly heated or caked, there is but little need of an inside inspection; but if there should be a suspicion that the center is musty, a "smell" through a plug or otherwise would be desirable.

The hollow testing or "smelling" plug is not in general use North, but in New Orleans, at least, it seems to work to the satisfaction of a few of the dealers, who firmly believe they can offset by its use the possibility of an unwitting purchase of hay which is a little "off."

### COWPEA HAY.

The principal reason that cowpea hay is not more generally produced is the difficulty of curing the large leaves, but the experiment stations of Alabama, Arkansas and Mississippi have all turned their attention to this problem and have made some decided advances in the art of economically curing the hay, which in feeding value ranks above the common grasses and is at least equal to good clover and alfalfa hay.

In order to facilitate the curing of the hay and also to avoid loss of the leaflets, the most nutritious part of the plant, the Alabama station grew cowpeas in a mixture with other grass crops, such as German millet. In good soils a peck of millet seed to a bushel of cowpeas proved useful in this respect. The difficulty is to find a grass that matures for hay making simultaneously with the cowpea, which as a rule matures after the millet.

In other tests amber sorghum drilled with "Wonderful" cowpeas gave a material increase of yield and a mixture that was ready for mowing with the cowpeas. The mixture was, however, so moist as to cause some difficulty in the curing. The result of these tests is the recommendation to use German millet in the mixture with early varieties of cowpeas and amber sorghum as a means of increasing the yield of later varieties.

The curing should be done with the smallest possible proportion of the mown crop exposed to the sunshine, which causes the leaflets to drop off. The rule deduced from the tests is this: "Cutting one day and twenty-four hours later raking into windrows, when the hay may remain twenty-four hours; then cocking, and, if practicable, leaving these cocks in the field two or three days, at the end of which time cocks may be opened for a few hours before hauling, or hauled without opening, according to the condition of the hay." It appears, however, that young and vigorous vines are difficult to cure as hay, even under favorable weather conditions, while old and matured vines cure readily under good conditions and make good hay, even after an exposure of two to four days of rain and cloudiness. The varieties producing no peas are the most difficult to cure, because they grow and remain succulent until frost. The varieties which produced most heavily of peas were most easy to cure as hay.

According to the North Carolina station's report

the cowpea plant for hay should be harvested as soon as the first pods turn yellow, cutting only in the morning when conditions of weather are promising. The hay should be tossed during the day and raked into windrows the same evening, turned and dried next day, and then cocked. If after the cocks have stood for a day no moisture can be forced from the hay by twisting a handful, it is ready for the barn.

#### PEANUT HAY.

The Arkansas experiment station, in Bulletin 84, has given some interesting particulars with reference to the cultivation of the peanut plant for forage. For this purpose, and to guard against sprouting of ripe nuts, the forage harvest should take place soon after the first formed pods have matured. The plants are loosened in the soil by a plow that cuts the tap root without tearing the nuts from the vine. The vines are usually gathered in the afternoon of the same day, three or four rows being thrown together. They are then cocked or left in windrows, and when partly wilted are stacked about poles and left to cure from two to four weeks. The Arkansas station prefers to leave the vines in windrows which are turned over every two days to expose the under surface to the sun. When the vines are thoroughly cured they are hauled to the barn and spread out in as thin layers as possible and turned occasionally until thoroughly cured. The yield runs from one to three tons per acre and is worth \$10 per ton, the forage being a by-product when the nuts are marketed.

#### HAY INSPECTION IN MINNESOTA.

F. W. Eva, chief inspector of grain in Minnesota, has prepared the following circular announcing the effect of the new law requiring the inspection of hay and straw:

"Chapter 196 of the general laws of 1905 provides for the official inspection and weighing of hay and straw at terminal points, and puts the operation of the law under the jurisdiction of the state Railroad and Warehouse Commission and the chief inspector of grain.

"On July 1, 1905, the law became operative, and all hay and straw shipped to terminal points will be inspected and weighed, unless otherwise ordered by the shipper. The commissioners and the chief inspector are desirous of the successful operation of this new system. We stand ready and are anxious to do everything in our power to accomplish the objects of the law, viz., a square deal to both consignor and consignee. To this end we invite the co-operation of all hay and straw producers and shippers.

"All hay and straw should be shipped subject to inspection and weighing, and under no circumstances should such state inspection and weighing be waived. We want to give the law a fair trial, and to this end invite the good-will of all those engaged in the production, shipping and handling of these commodities.

"Elevator men, postmasters, merchants and all others to whom this notice may come are respectfully requested to post the same in some conspicuous place."

#### TERMINAL FACILITIES FOR HAY.

In the matter of terminal facilities for handling hay, George S. Bridge of Chicago, chairman of the committee on terminal facilities, reporting to the National Hay Association, said:

"Little progress has been made in the last year in the way of additional hay terminal warehouses, other than those that are and have been in course of construction in the city of Baltimore. The Baltimore & Ohio Railroad has erected there a warehouse having a capacity of about 250 cars, properly equipped for the prompt handling of hay. The third house is now being erected, which will, when completed, furnish storage room for practically all of the hay arriving in that market. The system in use in that city seems to meet the needs of the trade and is apparently entirely satisfactory to the shipper, receiver and carrier alike.

"The sheds known as the Thirty-third Street Hay Sheds of New York City are likely to be removed during the coming year. The question of consolidating the hay business of Greater New York in one terminal warehouse is being considered. It is generally believed that if this can be brought about it will be of great benefit to the trade. There is greater interest shown to-day in the city of Chicago by carriers, receivers and shippers tributary to that market than ever before in the hay storage question and the needs are more apparent.

"The question of terminal warehouses is also being discussed to a greater or less degree in the cities of Cleveland, Cincinnati and St. Louis.

"Your committee feels that those interested in the business should not only continue agitation for the erection of these warehouses in the various terminal markets; but what is of more importance than the erection of the house is that the charges for storing the hay should be reasonable. Some of

the markets at the present time are charging at the rate of \$1 per day per car for hay after an expiration of forty-eight hours, which your committee believes to be extortionate. If we are to get the greatest good from the system of warehouses, they must be operated with a view to conserve the interests of all. We believe that the storage of hay should be fostered in the large markets and encouraged. It will tend to create a more uniform price for the commodity and to enlarge and develop the business."

#### SOME ARBITRATION DECISIONS.

The following are copies of decisions of the arbitration committee of the Kansas Grain Dealers' Association in recent controversies:

D. C. O'Neil of Axtell, Kan., vs. The Beall Grain Company of Kansas City, Mo.—There were three separate and distinct contracts with which this controversy is connected. The three different questions involved are: First, the quantity of grain required to fill the first contract; second, the quantity unshipped; third, the market difference on the unfilled portion.

The evidence introduced shows that the transactions were made by telephone and subject to shipper's certified weights, and that each separate transaction was confirmed by the buyer the same day in which it was made; that in each and every instance the buyer understood that he had purchased a certain number of bushels; that the seller accepted each and all of these confirmations without comment or objection until after all grain had been shipped and he had been requested to complete his contract; that he then claimed that in the first contract he sold a certain number of cars instead of a certain number of bushels; that on each and all of his invoices shipper failed to specify on which contract shipment was supposed to apply or complete; that on receipt of buyer's request for immediate shipment of the balance due on contract the seller, under date of February 4, positively refuses "to put any more grain in on this trade;" that the Beall Grain Company prolonged the correspondence and did not make claim on the unfilled portion until February 24, which was subsequent to an advance of several cents per bushel.

Inasmuch as the price was the same in each of these three contracts, it is impossible for this committee to determine from shipper's invoices anything as to what his understandings or intentions were. Therefore, it is the decision of this committee:

First. That inasmuch as the seller neglected to confirm his contracts or offer any objection to the confirmations which he received from the buyer, the number of bushels (2,000), as confirmed by the buyer, instead of the number of cars (2), as later claimed by the seller, should determine the quantity contracted.

Second. That the total amount contracted was 8,000 bushels; the total amount shipped, according to the shipper's certified weights, was 7,363 bushels 12 pounds, leaving a shortage on contract of 636 bushels 44 pounds.

Third. That it was the duty of the buyer to have bought this corn in for the amount of the seller on February 6, which was the date of the receipt of the seller's letter positively refusing further shipments; that on February 6 the market value of the grade and kind of corn contracted was 43 $\frac{3}{4}$  cents per bushel, an advance of 1 $\frac{1}{4}$  cents per bushel over the contract price.

Fourth. That D. C. O'Neil is indebted to the Beall Grain Company in the sum of \$11.15.

Fifth. That inasmuch as both parties were at fault, the costs of this arbitration, \$6, shall be divided equally between them.

W. M. Chelf vs. The Steven-Scott Grain Company.—This committee finds that on January 23, 1905, plaintiff sold defendants five cars of mixed corn and shipped the grain to fill said sale; that on February 4, 1905, said plaintiff sold said defendants two cars of white corn at 36 $\frac{1}{2}$  cents, f. o. b., and shipped two cars to apply thereon; that one of these cars graded white, the other mixed.

It is our understanding that it is optional with the buyer whether he shall apply mixed corn on a white corn contract; but if he pleases to do so, such application shall be made upon the basis of the market difference between white and mixed corn on the date of inspection.

Car No. 96603 was inspected on April 1 and graded No. 2 mixed corn. On this date the Kansas City market difference between white and mixed corn was  $\frac{1}{2}$  cent per bushel. Said car contained 1,571 bushels. This committee therefore awards the plaintiff \$7.85 and assesses the costs of this arbitration, amounting to \$5, to said defendants.

A. H. BENNETT,  
J. T. WHITE,  
W. A. MILLER,  
Arbitration Committee.

#### PERSONAL

Archie Flanders is grain buyer at Andover, S. D.  
Ed Geseka is in charge of the Imperial Elevator at Towner, N. D.

Mr. Beltz is agent for the new Occident Elevator at Pingree, N. D.

M. G. Lines is managing an elevator at Langdon, N. D., this season.

Alfred Youngberg has resumed work at Booge, S. D., as grain buyer.

Alvin Campbell is manager of the McCabe Bros.' elevator at Niles, N. D.

C. A. Frank is wheat buyer at the Atlantic Elevator in Buffalo, Minn.

Fred K. Jewett has taken charge of an elevator at Coburn, N. D.

The Hyde Elevator at Fountain, Minn., is in charge of E. J. Keenan.

C. J. Patterson has opened the Monarch Elevator at Pingree, N. D.

Ed Munson is agent for the Imperial Elevator Co. at Osnabrock, N. D.

Halbor Groven has taken charge of the Acme Elevator at Walun, N. D.

August Evert is in charge of the Western Elevator at Morgan, Minn.

F. Simmons is in charge of the Van Dusen Elevator at Marshall, Minn.

Fred Quinn has taken charge of the State Elevator at Waverly, Minn.

John Burt is in charge of the Westfall & Durbin Elevator at Munich, N. D.

Joseph Daniels is acting as grain buyer for an elevator at Calvin, N. D.

H. G. Shimmin is buyer in the National Elevator at Wheaton, Minn.

Martin Hegg is in charge of the Great Western Elevator at Lenora, N. D.

C. F. Langworthy is in charge of the Western Elevator at Kiester, Minn.

J. H. Myers is in charge of the Powers Elevator Co.'s house at Gackle, N. D.

T. F. Johnson has charge of the Erie Elevator at Erie, Colo., this season.

A. Gorsett has taken charge of the A. A. Truax Elevator at Burbank, S. D.

Seth Curry Jr. is wheat buyer at the Cargill Elevator in Galesburg, N. D.

Charles Wood of Hoople, N. D., has charge of an elevator at Ardoch, N. D.

P. P. Maney has opened the Schmid & Anderson Elevator at Vesta, Minn.

A Mr. Stewart has taken charge of the Ogilvie Elevator at Thornhill, Man.

Ed Rickmore has taken position with the Webster Grain Co., Webster, S. D.

A. E. Hatch is representing the Interstate Grain Co. at Holland, Minn., this year.

Hiram Medbury has taken charge of the Western Elevator at Gettysburg, S. D.

Otto Johnson is agent for the Reliance Elevator Co. at Blooming Prairie, Minn.

Oliver F. Strunk is principal buyer for the Loomis Elevator at Ruskin, Minn.

Carl Allen is wheat buyer at the Atlantic Elevator Co.'s house in Warren, Minn.

Wm. Fowlie has taken charge of the St. Anthony & Dakota Elevator at Edmore, N. D.

It is understood that Mr. Cretty is the new grain buyer at Twin Lakes, Minn.

John Callahan is the new grain buyer at the Crown Elevator at Frederick, S. D.

I. W. Brown has opened the American Grain Co.'s elevator at Ash Creek, Minn.

H. C. Emke has taken charge of the Andrews & Gage Elevator at Richdale, Minn.

Peter Haag has charge of the Springfield Milling Co.'s elevator at Dudley, Minn.

Will Lembke, recently of Morris, Minn., is running an elevator at Emerick, N. D.

Ray Blackmun has taken charge of Bingham Bros.' elevator at Springfield, Minn.

Otto O. Evans has charge of the Duluth Elevator Co.'s house at Hampden, N. D.

W. C. Klotzbach is in charge of Gilchrist & Co.'s grain business at Cresco, Iowa.

A. Galagan has taken charge of the Peavey Elevator Co.'s elevator at Spencer, S. D.

A Mr. Arneson of Hanley Falls, Minn., has taken charge of the Northwestern Elevator at Rothsay, Minn., succeeding Mr. Neegard, who has

been elected manager of the Wilkin County Grain and Mercantile Co.

O. J. Eide has opened the Woodworth Elevator Co.'s house at Westbury, Minn.

Will Lichtenberger is local agent for the Great Western Elevator Co. at Echo, Minn.

Anfin Osboe has taken the position of buyer for the Atlas Elevator Co. at Hills, Minn.

Elmer Evenson is in charge of the Thorpe Elevator at Maynard, Minn., this season.

Frank Chan is buying grain at Forada, Minn., for the Osborne-McMillan Elevator Co.

C. R. Thom is in charge of the Willmar Milling Co.'s new elevator at Clara City, Minn.

W. J. Blackmun has taken a position with the Western Elevator Co., at Wabasso, Minn.

Fred Scherrer has been appointed grain buyer in the Monarch Elevator at Woods, N. D.

It is announced that Ray McAuley is in charge of an elevator at Sykeston, N. D., this season.

J. P. Polifka has been engaged to buy wheat at the Atlantic Elevator, Tenney, Minn.

A Mr. Stevenson has taken charge of the State Elevator Co.'s house at Blanchard, N. D.

James Hogan is successor to H. E. Diemer as wheat buyer at Winnipeg Junction, Minn.

Wm. Benz has taken a position as agent for Bingham Bros.' elevator at Seaforth, Minn.

G. O. Farrel is the new manager of the Hubbard & Palmer Elevator at Luverne, Minn.

A. P. Rankins has been appointed buyer at Marion, N. D., for the Powers Elevator Co.

W. S. Ansdon has opened his elevator at Garfield, Minn., with J. C. Peterson as buyer.

Walker Dresser is buyer for the Pacific Elevator Co. at Hazel Run, Minn., this season.

Herman Landeen has been engaged to represent the M. & N. Elevator Co. at Comstock, Minn.

E. S. Ferguson has taken charge of the Red River Milling Co.'s house at Watasco, Minn.

C. C. Peterson has taken charge of the Cargill Elevator at Chandler, Minn., for the season.

Hans Strangeland will run the Western Elevator Co.'s house at Astoria, S. D., this season.

Wm. Landigan has taken a position with the St. Anthony & Dakota Elevator at Manvel, N. D.

Wm. Richards has been appointed buyer at Orleans, Minn., for the Woodworth Elevator Co.

Anton Trana has been placed in charge of the Andrews & Gage Elevator at Henning, Minn.

Fred Augustine has been appointed grain buyer for the Exchange Grain Co. at Sumpter, Minn.

E. L. Grater has taken the position of buyer at the O'Leary & Cabell Elevator in Albee, S. D.

R. Theiring of Ivanhoe, Minn., is grain buyer for the Western Elevator Co. at Lamberton, Minn.

A. Jackson has taken the position of grain buyer for the Hennepin Elevator Co. at Downer, Minn.

W. F. Atkinson on September 1 took charge of the Monarch Elevator Co.'s house at Melvin, Minn.

W. M. Christensen of Stewart, Minn., has accepted a position as grain buyer at Flaxton, N. D.

Geo. W. Ion of Drayton will buy grain for the Andrews & Gage Co. at Pittsburg, N. D., this season.

Charles Morey is located at Pipestone, Minn., and will buy grain for the Northwestern Elevator Co.

D. L. Stewart of Cavalier, N. D., has removed to Munich, where he will have charge of an elevator.

It is stated that Jake Meyers of Windsor has taken charge of the Powers Elevator at Gackle, N. D.

O. E. Larson of Kensington, Minn., is the new buyer of the Woodworth Elevator Co. at Litchville, N. D.

C. R. Culver of Lakota, N. D., has taken charge of the Minneapolis & Northern Elevator at Arvilia, N. D.

G. M. Robinson, formerly of Carmi, Ill., has taken charge of the National Elevator at Rolla, N. D.

Reported that A. D. Holliday has taken the management of McCabe Bros.' elevator at Cavalier, N. D.

Isaac Orlebeke will have charge of the St. Anthony & Dakota Elevator Co.'s house at Stiles, N. D.

Clarence Black has been employed as assistant in the St. Anthony & Dakota Elevator at Childs, Minn.

Guy Chaffee has accepted a position as grain buyer for the Hunting Elevator Co. at Otranto, Minn.

A. C. Sorenson, buyer for the Cargill Elevator at Houston, Minn., was recently elected manager of the Farmers' Mutual Live Stock Union, Albert

Lea, Minn., and has resigned his position with the elevator company.

C. E. Goodsell has charge of the elevator and coal business of the Empire Grain Co. at Tintah, Minn.

Conrad Fuchs of Watkins, Minn., is agent for the Osborne-McMillan Elevator Co., at Lintonville, Minn.

C. C. Smeby has succeeded George N. Evenson as agent for the Van Dusen Elevator at St. Peter, Minn.

Dan Leif of Norwood, Minn., is in charge of the Reliance Elevator Co.'s warehouse at Glencoe, Minn.

Walter Carstensen has been appointed grain buyer for the Western Elevator Co. at Wayburne, Minn.

The Benson Grain Co. has opened its house at Lake Wilson, Minn., with J. Johns of Worthington as buyer.

C. E. Highie has been appointed grain buyer at Hixon, Minn., for the St. Anthony & Dakota Elevator Co.

J. M. Larson will buy grain at Barnesville, Minn., this season. He was formerly at Wembleton, Minn.

C. E. Croson of Argonia, Colo., has been appointed deputy state grain inspector, with headquarters at Wellington.

James D. Smith is grain buyer at the elevator in Guthrie, Minn., which was recently opened for the season.

W. J. Schueller of Howard, S. D., has taken charge of the Bennett Grain Co.'s elevator at Fulda, Minn.

A. M. Monson has taken the position of manager at Belview, Minn., for the Great Western Elevator Co.

J. W. Foster is in charge of the Ames Elevator at Alberta, Minn., which was opened for the season on August 28.

C. W. Mahnquist has accepted a position as buyer for the Minnesota & Western Grain Co. at Lester, Iowa.

W. P. Robertson, from Osage, Iowa, is in charge of the Western Elevator Co.'s house at Dodge Center, Minn.

Emil Swanson has accepted a position with Nels Enge in the elevator business at Wessington Springs, S. D.

E. A. McCay has assumed the management of the St. Anthony & Dakota Elevator Co.'s house at Munich, N. D.

Earl Hanson is buyer at the Andrews & Gage Elevator, Henning, Minn., which has been opened for the season.

Charles Sieberz has accepted the position of grain buyer for the Sleepy Eye Milling Co. at Lebanon, S. D.

F. C. Reynolds of Kasota, Minn., has been employed as manager of the Monarch Elevator at Renville, Minn.

Ed Stockman has closed out his business at Webster, S. D., and is running an elevator at Oakland, Minn.

George W. Hunt of Brownsdale, Minn., has been engaged to run the Osborne-McMillen Elevator at Campbell, Minn.

Don Ochal of Minneapolis has been engaged as grain buyer for the Western Elevator Co. at Hammond, Minn.

H. S. Yarrow of Fergus Falls, Minn., has become a wheat buyer for the Welch Commission Co. of Minneapolis.

R. W. Freeman of Hastings, Minn., has taken charge of the Powers Elevator Company's business at Jamestown, N. D.

Ward Hartwick is agent at Morgan, Minn., for the Eagle Roller Mill Co., succeeding Mr. Keisling, who has resigned.

Fred Kuhry, who has been buying wheat at Lanona, N. D., for several years, has been transferred to Kensal, N. D.

The Rippe Elevator at Sherburn, Minn., has been opened for business with G. A. Hovda of Grand Meadow as buyer.

O. C. Laude, formerly with the St. John Grain Co. at Storden, Minn., is now in charge of the St. John Grain Co.'s house.

D. W. Miller, formerly of Winnebago, Minn., has taken charge of the Hubbard & Palmer Elevator at Lake Crystal, Minn.

Smith A. Penney, wholesale grain dealer of St. Joseph, Mo., and Miss Edna Letcher Baughman of Hustonville, Ky., were united in marriage at Cincinnati, Ohio, on August 16.

S. D. Parkhurst, general agent of the Chicago Great Western at Omaha, is to be manager of the new Independent Elevator in that city. E. S. Carris has been appointed foreman. He was formerly con-

nected with an elevator at Minneapolis and is a practical man.

Thorwald Amundson of Hayward is in charge of the Hyde Elevator at Rushford, Wis., now owned by Pierce & Stevenson.

J. C. Diffenderfer, late manager of the Lincoln Grain Co., Lincoln, Ill., has removed to Chicago, where he will reside in the future.

E. Van Brunt of Langford will buy grain at the National Elevator, Cogswell, N. D., recently purchased by E. C. Swan of Britton.

W. M. Christensen, for the past three years manager of the Crown Elevator at Stewart, Minn., has been succeeded by F. M. Senescall.

Charles Strauch of Traverse has succeeded E. J. Blank as wheat buyer at the Iowa & Minnesota Cereal Co.'s elevator at Nicollet, Minn.

Emil Dahl has taken charge of the Prairie Elevator Co.'s business at Plummer, Minn., for the season, removing from Mahnomen, Minn.

L. W. Hunt, who has been buying grain for the farmers' company at Grand Meadow, Minn., is now representing the Cargill Co. at that place.

J. A. Bailey, late manager of Elevator "A" at Hastings, Minn., has taken a position as traveling auditor for Miller Bros. of Minneapolis.

J. D. Keltgen succeeds Chas. Spilman as buyer for the Peavey Elevator at Bird Island, Minn. Mr. Spilman has removed to Perham, Minn.

Arthur Osterberg has removed from Kensington, Minn., to Elbow Lake, Minn., where he has taken charge of the Atlantic Co.'s Elevator.

James E. O'Hara has moved from Franklin, Minn., to Boyd, Minn., where he will continue to buy grain for the Great Western Elevator Co.

Charles Miller is in charge of Bingham Bros.' elevator at Wabasso, Minn., and A. C. Ruddy has the agency for the same firm at Wanda, Minn.

O. A. Talbott, of the Talbott Grain and Commission Co., Keokuk, Iowa, has been confined to a hospital in that city on account of an operation.

Fred Green, who has been running the Peavey Elevator at Adrian, Minn., has gone to Winnipeg, Man., where he will be employed by the same company.

Charles S. Stillwell, formerly manager at Appleton, Minn., for the Interstate Elevator Co., has been made a traveling representative of the same house.

J. H. Waddell has taken charge of an elevator at Havana, N. D., which he recently purchased. He has been manager of the Cargill Elevator at Jackson, Minn.

C. W. Currie, formerly agent of the Stewart Elevator Co. at Maple Plain, Minn., is now at Perth, N. D., in charge of an elevator for the same company.

Mr. Goltz, for the past year grain buyer at the Eagle Elevator, Echols, Minn., has removed to New Ulm, where he has taken a position with another concern.

Hans Miller, for more than 20 years with Bingham Bros., in charge of their Lamberton, Minn., elevator, has taken charge of the firm's house at Wabasso, Minn.

Charles Minert has taken charge of the Joliet Elevator Co.'s house at Holloway, Minn. C. Spence, who was buyer at this place, has been transferred to Hankinson, S. D.

N. P. R. Nelson, for the past year in the employ of the Woodworth Elevator Co. at Carlos, Minn., has opened the Woodworth Elevator at Parkers Prairie, Minn.

G. H. Hodges, one of the official grain inspectors at Fort Worth, Texas, has resigned to accept a position as superintendent of the Dazey-Moore Elevator at that point.

The Sleepy Eye Elevator at Houghton, S. D., has been opened for business with C. M. Spurr as buyer. Thomas Norton will buy for the same company at Seneca, S. D.

F. E. McGrevey, for several years Great Western Elevator agent at Englevale, N. D., has gone to the northern part of the state, where he has taken charge of an elevator.

N. G. Blackstrom, who has had charge of the St. Anthony & Dakota Elevator at Warren, Minn., has taken charge of the Spaulding Elevator Co.'s new house at Alvarado, Minn.

Iver Bondy has succeeded Carl Hanson as wheat buyer for the Woodworth Elevator Co. at Henning, Minn. Mr. Hanson will buy grain for Andrews & Gage at this point.

C. E. Needham of Laurel, Neb., has removed to Coggen, Iowa, where he will have the management of a line of elevators on the Chicago, Anamosa & Northern, a new railroad which is being built from Anamosa and Quasqueton, Iowa. Mr. Needham says that four elevators will be erected this fall and that during their construction the firm will do track buying. Next year they will build a number of

elevators and Mr. Needham expects then to make his permanent home at Quasqueton.

W. B. Hibbard assumes the duties of grain buyer for the Osborne-McMillan Elevator Co. at Omemee, N. D., on September 15.

James Gillett, formerly of Burchinal, Minn., has located at Welcome, Minn., where he will represent the Nye-Schneider-Fowler Co.

The Reliance Elevator at Blooming Prairie, Minn., which has been closed for a long time, has been opened by Otto Johnson, who will have charge of the house this season.

Fred Camp has severed his connection with the Reliance Elevator Co. at Twin Brooks, S. D., and will buy grain independently. Richard Bohm will buy for the Reliance company.

J. M. Larson has been succeeded as manager of the Woodworth Elevator at Wimbledon, N. D., by George M. Hunt, who has been with the Clendenning Company at that place.

R. J. Bates, for the past year in charge of the St. Anthony & Dakota Elevator at Neilsville, Minn., has been transferred to Angus, Minn., being succeeded at Neilsville by C. H. Halsa.

J. H. Fulton, for the past few years wheat buyer for the St. Anthony & Dakota Elevator at Mentor, Minn., has taken a similar position at Park River, N. D. O. Thompson succeeds Mr. Fulton at Mentor.

### COMMERCE COMMISSION RULINGS.

The Commerce Commission on August 28 rendered a decision in the case of T. M. Kehoe & Co. of Terre Haute, Ind., against the Evansville & Terre Haute Railroad Company and others in the matter of rates on the shipment of hay. The Evansville & Terre Haute Railroad refused to apply a proportion on shipments billed to Evansville in care of a southern line for points beyond, having discontinued a tariff providing therefor, which was effective from November 10, 1903, to July 19, 1904. The rate from Evansville by the other defendant lines is the same whether shipped locally from or through Evansville. The Commission held that it is unreasonable and unjust for the Evansville & Terre Haute Railroad to insist upon the billing of these shipments to a specified destination, in order to secure application of the lower proportional rate while it declines to assume responsibility for such billing, and does not post in its stations the tariffs from which the shipment should be billed; and that while the proportional rate is kept in force it is reasonable and just that these shipments shall be billed to Evansville in care of the road leading southerly therefrom, as was actually done in 1903 and 1904. The complainants are allowed reparation on certain shipments.

The Commission on August 31 announced the present freight charges on corn products and corn from Missouri River points to Pacific Coast terminals, in so far as the rate on corn products is more than 5 cents above the rates on corn, constitute a discrimination against corn products and producers thereof at places on the Missouri River.

The Commission on August 31 rendered a decision in the matter of rates on corn and corn products from Missouri River points to points in Louisiana. It was held that prior to July 1, 1905, rates per 100 pounds from Missouri River points to points in Louisiana were 5 cents higher on cornmeal than on corn, but on that date the differential was removed by respondents and the rates on corn and cornmeal made the same. Such action having obviated the complaints herein, no order is considered necessary.

The Commission has rendered a decision in the proceeding entitled "In the matter of rates on corn and corn products from Missouri River points to points in Texas," wherein it is shown that up to February 19, 1905, the rate on cornmeal was 3 cents per 100 pounds higher than the rate on corn for shipments from Missouri River points to points in Texas. On that date the differential against cornmeal was advanced so that it varied from 7 to 9½ cents. On April 15 the differential was made 5 cents for all Texas destinations. The differential for hominy grits and bran remains at 3 cents. Upon consideration of the facts and circumstances the Commission held that the differential on cornmeal shipped from Missouri River points to Texas destinations should not be more than 3 cents above the rate on corn in force between the same points.

A Nebraska paper says: "C— & —, grain dealers, are earnestly searching for a young man about 25 years of age, who a couple of weeks ago called at their office and secured a check for \$50 as advance payment for a lot of wheat which he claimed to possess and which he was to deliver at an early date. Later investigation revealed the fact that the young man had no wheat and shortly after securing the check disappeared from this section."

### FIRES--CASUALTIES

The Security Elevator at Clarkfield, Minn., was damaged by lightning recently.

The I. I. Berg Elevator at Velva, N. D., was slightly damaged by fire on August 26.

The gas engine in O. O. Means & Co.'s elevator at Cooksville, Ill., broke a crank shaft recently.

The M. & N. Elevator at Grandin, N. D., was slightly damaged recently, by being struck by lightning.

The Clark Mill and Elevator at Clark, Mo., owned by T. C. Walker, burned September 3. Loss, \$3,000; insurance, \$600.

Moss Bros.' elevator at Harwood, Mo., was struck by lightning on August 16, and destroyed, together with several thousand bushels of wheat.

The elevator of Wm. Turett at Findlay, Ill., was damaged to the extent of \$2,500 by fire on August 19. The loss is covered by insurance.

The grain and provision store of A. C. Woodward & Son at Skowhegan, Me., was destroyed by fire on September 7, resulting in a loss estimated at \$20,000.

Hagadorn & Son's elevator at Curtis, Neb., was burned recently. It contained 15,000 bushels of wheat, and the loss is about \$10,000 in excess of the insurance.

Recently the pit in the elevator at Lovewell, Kan., was undermined by rats and the cement work gave way, necessitating the closing of the house while repairs were being made.

The four-story grain, coal and wood warehouse of Andrew Church at South River, N. J., was burned on August 22. The fire started on the fourth floor from an unknown cause. The loss is \$10,000.

The Farmers' Elevator at Olivia, Minn., was damaged by a severe storm on the night of August 20. The engine room was moved on its foundation and a part of the roof and side of the driveway was torn off.

Lightning struck the Westbrook-Gibbons Elevator at Glenwood, Neb., on August 21, and the fire which followed totally destroyed the building and contents. The loss is about \$10,000, fully covered by insurance.

The Comins Grain Co. sustained a loss of \$1,000 in a fire which destroyed a number of business houses at Flemingsburg, Ky., at an early hour on the morning of September 1. The loss is covered by insurance.

Green Bros.' elevator near the Pere Marquette tracks at Harrow, Ont., was burned to the ground on the morning of August 11. A quantity of grain was also destroyed. The loss is partially covered by insurance.

The Brant Milling Co.'s four-story elevator and warehouse at Brant, Ont., was burned recently. The fire was discovered in the boiler room. The loss on the building was \$6,000 and flour valued at \$1,500 was also destroyed.

Francis Sipe was suffocated in the Duff Elevator at Bartley, Neb., on August 28. His father, James Sipe, is manager of the elevator and was loading a car with wheat when the boy fell in the bin and was smothered to death.

The grain elevator of McLane, Swift & Co. at Edwardsburg, Mich., was burned on August 22, as the result of a stroke of lightning. The house had a capacity of 30,000 bushels and contained about 15,000 bushels of wheat at the time of the fire. The loss is \$20,000.

The grain elevator of C. F. Iddings and the lumber yard adjoining at Julesburg, Colo., were destroyed by fire recently, causing a loss of about \$15,000, partially covered by insurance. The fire originated from a spark from a locomotive. The elevator will be rebuilt.

The Dawson Elevator at Hardin, Mo., owned by the Cunningham-Beckemaier Supply Co., and operated by Seward & Carey, burned recently. The house contained 1,500 bushels of wheat, which was all damaged or destroyed. The grain was insured for \$1,500 and the elevator for \$750.

Fire at Portland, Ore., on September 2, destroyed the elevator dock and seriously damaged the Albinia dock, entailing a loss of \$330,000, equally divided between the Pacific Coast Elevator Co., and the Oregon Railroad and Navigation Co. Sixty thousand bushels of wheat were destroyed.

Fire on August 21 destroyed \$10,000 worth of hay, grain, flour, etc., in the elevator of the L. C. Daniels Grain Co. at Hartford, Conn., and damaged the building to the extent of about \$1,000. The stock was insured for \$8,000. The elevator is a four-story brick structure and was built according

to mill construction plans. The fire started in the northwest corner of the building on the main floor where the electric motor which supplies power is located. The local fire department responded promptly to the alarm and after two hours of hard work got the blaze under control.

The Arnold & Rapp Elevator at Geneseo, Ill., was destroyed by fire on August 11. The fire started at 8 o'clock p. m., and is supposed to have been caused by the proximity of cobs to the boilers. The plant was insured for \$2,500 and the loss was about \$1,300 on the building. There was no insurance on the grain.

The grain elevator at Napoleon, Ohio, owned by C. H. Travis of Toledo was burned on August 18. The fire started in the engine room and owing to the high wind which was blowing at the time was soon beyond control. The house contained 13,000 bushels of grain, which was insured for \$4,000. The building was valued at \$10,000 and insured for \$6,000.

The grain storage building of Frank W. Burgess at Clayton, Ill., was damaged by fire recently. The structure contained about 200 tons of hay and 2,000 bushels of wheat. The hay was badly damaged, but the wheat was not injured. The fire was discovered about 7:30 o'clock p. m., and is supposed to have been started by a spark from an engine. The warehouse was insured for \$1,000 and the contents for \$2,000. This insurance, it is said, fully covers the loss.

The Interstate Elevator at Morris, Minn., was burned to the ground at 11:30 o'clock p. m., September 2. The fire started in a cupola, presumably from spontaneous combustion. The house was owned by C. H. Snyder and D. B. Riniker and was valued at \$4,500. The insurance is \$4,000. There were between 500 and 600 bushels of oats in the elevator and on these the loss is total. The burned structure had a capacity of 30,000 bushels and will probably be rebuilt at once.

The elevator of the D. Rothschild Grain Co. of Davenport, Iowa, located at McCausland, Iowa, burned to the ground on the evening of August 19, resulting in a total loss, with \$3,000 insurance. It is not known how the blaze originated. It was discovered about 8 o'clock and within a few hours the structure was in ruins, although a bucket brigade made an ineffectual fight to save it. The elevator had been in the hands of the D. Rothschild Grain Co. for the past four years, having been purchased from Captain McCausland, who built it. Henry Schlotfeldt was manager. The burned structure will be rebuilt.

The Midland Elevator, located two miles east of Joliet, Ill., on the Michigan Central Ry., was damaged by fire on September 2. The house was struck by lightning, and the 300,000 bushels of barley and oats which it contained were badly damaged. The loss will aggregate \$200,000, with insurance of \$145,000. The structure was owned by the Union Elevator Co., in which Bartlett, Frazier & Carrington of Chicago are interested. The fire was a spectacular one. A flash of lightning struck the cupola about 1 o'clock a. m. and almost instantly the flames spread, enveloping the annex and spreading over the roof of the main building. Within a few minutes the fire swept below and it was realized that the building was doomed. During the fire two cars of grain were moved to a place of safety, but a third was consumed. The house cost \$100,000.

The Cloud County Grain Co.'s elevator at Concordia, Kan., was entirely destroyed by fire between 3 and 4 o'clock on the morning of August 24. The house contained between 10,000 and 11,000 bushels of wheat. The elevator had been running all night taking in grain and shortly after 2 o'clock the engineer discovered a blaze in an addition on the north. He turned in an alarm, but before the firemen reached the scene the flames were beyond control. They confined their efforts to saving nearby buildings, and the elevator office and a number of cars were saved. The Scott-Stevens Grain Co. of Wichita owned the elevator and it was run by R. E. Rowland, who had a third interest in the business. The building and machinery were valued at \$6,000, and it is stated that the insurance was \$4,000 on the plant and \$4,000 on the contents.

The manager of an insurance company which makes a specialty of insuring grain risks said that never before had he as many calls for policies on stored grain as in the last few weeks. Many of these come from dealers, showing that grain is being held in the elevators.—Columbus, Ohio, Journal, September 4.

The final hearing in the Louisville grain rate case will be held at the offices of the Commerce Commission in Washington, D. C., on September 20. It involves rates on grain and grain products from St. Louis and East St. Louis to points in territory south of the Potomac and Ohio rivers, passing through Louisville to the point of destination.

## BARLEY AND MALT

The Froedert Bros. Grain & Malt Co. is building an addition to its plant at Seventh and Cherry streets, Milwaukee, Wis., to cost \$6,400.

At a recent meeting of farmers in Rochester, Minn., a resolution was adopted, recommending the holding of barley by the growers, owing to unsatisfactory prevailing prices.

The Milwaukee Chamber of Commerce has established a new grade of barley, to be known as "feed barley." The requirements of the grade will be a test of 40 pounds to the bushel.

The final report of the Department of Agriculture shows that the acreage of barley in the United States for 1904 was 5,145,878 acres as compared with 4,993,137 acres for 1903. The yield in 1904 was 139,748,958 bushels as compared with 131,861,391 bushels for 1903.

A grain buyer at Austin, Minn., has sounded a warning to barley raisers. He states that the market has been greatly upset by farmers selling their barley before it is seasoned. He says: "Don't thrash your barley while it is green, for it will mean a heavy loss to the grower."

Frank J. Hinkley, grain inspector of Milwaukee, returned recently from an inspection trip through the grain belt. He states that the barley yield is about normal and that the grain is somewhat discolored, due to the frequent rains which prevented its being cared for when it was ready.

It is stated that the demand for barley in Australia for malting is in excess of the home supply, and some has been imported from California. It is quoted at 3s. 9d. to 4s. per bushel of 50 pounds. The duty is 6d. per cental. The total importations into the Commonwealth for 1904 were 122,454 centals, valued at £2,912. In addition there was an importation of malt to the value of £57,571.

The John Reinig Estate has bought the stock in the Fond du Lac Malt & Grain Co., Fond du Lac, Wis., formerly owned by Charles and F. J. Rueping. W. C. Reinig, secretary and treasurer of the company, negotiated the sale, the consideration being \$65,000. The business was established by the late John Reinig, who was ably assisted by his son, Wm. C. Reinig, the present head of the firm.

The barley crop in Schuyler County, New York, is the largest in 15 years. There was a time when barley was one of the staple crops of this portion of New York, but the farmers gradually stopped growing it until a few years ago a field of barley was a rarity and local maltsters were compelled to depend entirely on the western product. Of late years barley raising has come into vogue again and the acreage this season is the largest in many years.

From South Dakota and southern Minnesota there is considerable complaint of injury to barley through staining in the shock. The trouble is attributed to the heavy straw and the large size of the shocks. Farmers are advised to put up long shocks or small round ones. The straw is said, by men of experience, to contain more moisture this season than ever seen before. The sweating or evaporating keeps the shock in a moist condition and results in staining the grain.

### TIME FOR THRASHING BARLEY.

The consensus of opinion elicited by questions from the Wahl-Henius Institute of Chicago is, "the best quality of grain can usually be secured by thrashing from the shock as soon as the berries are fully hard and dry. Otherwise the barley should be stacked when it reaches this condition and thrashed after it has passed through the sweat."—A. M. Ten Eyck, Kansas Agr. College.

If the grain has not ripened thoroughly before thrashing it should be spread out on the barn floor and not piled in deep bins.—Andrew M. Soule, University of Tennessee.

Farmers should be impressed with the importance of separating the tops and bottoms of the stacks and thrashing that grain separate, keeping it separate, thereby obtaining a better quality of barley from that portion of the stack which has not been exposed to the weather or absorbed moisture and odors from the ground. In this connection we beg to call attention to the fact that one of the greatest drawbacks barley men of this country have to contend with is that a very large proportion of each year's barley crop is allowed to stand in the shock until ready for the thrasher. The farmers do not seem to appreciate the importance of proper shocking or proper stacking or the benefits which they will obtain from it.—D. Rothschild Grain Company, Davenport, Ia.

### IMPORTS AND EXPORTS OF BARLEY AND MALT.

#### BARLEY.

Imports—	Bushels.	Value.
July, 1904 .....	226	\$ 135
July, 1905 .....	93	82
Seven mo. end. July, 1904....	25,477	12,816
Seven mo. end. July, 1905....	16,197	8,183

#### Exports—

July, 1904 .....	98,618	55,400
July, 1905 .....	222,141	112,892
Seven mo. end. July, 1904....	2,661,251	1,527,196
Seven mo. end. July, 1905....	4,959,181	2,609,301

#### BARLEY MALT.

Exports—	Bushels.	Value.
July, 1904 .....	47,976	34,692
July, 1905 .....	38,644	24,828
Seven mo. end. July, 1904....	295,134	210,453
Seven mo. end. July, 1905....	309,193	212,023

### A BARLEY CROP ESTIMATE.

The annual estimate by The Western Brewer of the barley yield was published on August 15. These annual estimates by the paper named have been so exceptionally accurate in past years that the one for the current year will be read with interest by the barley trade. The inquiry covered 43 points in 26 counties in Iowa; 28 points in 17 counties in Minnesota; 26 points in 22 counties in Wisconsin; 22 points in South Dakota and many in North Dakota, Kansas, Michigan and the Pacific Coast. We quote the compiler's conclusions only, as follows:

"The reports as tabulated show an increase in acreage in the five principal barley raising states of Iowa, Minnesota, Wisconsin, South and North Dakota of about 3 per cent. Last year's acreage in these five states was 3,089,629 acres. Adding to these figures 3 per cent we will have an acreage of about 3,182,317 acres. But on the other hand the decrease in yield in these five barley states is sufficient to nearly counterbalance the increase in the acreage, so that we cannot expect more than 85,222,559 bushels, or 2,670,411 bushels less than last year, when the average yield per acre was 28.5, while this year's average is but 27 bushels. The reduction in yield is mainly due to the heavy rains which, while promoting the rapid growth of the straw, impeded the proper development of the barley corn.

"Last year California and seven other Pacific states produced a crop of 38,970,234 bushels. It is probable that these states, which comprise California, Oregon, Washington, Utah, Arizona, Montana, Nevada and Idaho, will have about 1,000,000 less this year. The remaining barley raising states of this country had last year a crop of 12,855,781 bushels. Assuming their having 1,000,000 less this year, the total crop of the country would foot up in the neighborhood of 136,000,000 bushels, or an average yield of 26 bushels per acre, instead of last year's average yield of 27.2.

"Both in color and in quality this year's barley crop is very much inferior to last year's. Indeed it is one of the poorest in recent years. Iowa, especially, is unfortunate in having a very spotted crop of barley. Some of her counties which last year prided themselves on the excellent quality of their barley have this year barley suitable for malting purposes. The Minnesota crop is also greatly spotted. The river section in that state, which last year had such fine plump and bright barley, has this year very little of that class, but mostly shoe-pegs and dark barley. The best reports as to color and quality come from Wisconsin and South Dakota. Both these states will probably send to market the brightest malting barley during the coming season.

"It is, of course, too early to predict values for the new crop. This year, more than ever before, values will be governed by the price of oats and corn. Inasmuch as this year the bulk of the new barley, which will govern our market, is so very inferior, it will have to sell low. Should the price of oats and corn be comparatively higher than barley, then farmers will largely feed their barley and sell their oats and corn. In that case the spread between low-grade malting and choice barley will not be as wide as if oats and corn prices should be lower comparatively than barley. In any event we may expect a spread of ten to fifteen cents between low-grade and choice malting barley."

The government report on the condition of the barley crop, issued on the first day of August, indicated a barley crop of 134,000,000 bushels and gave the condition at that date as 89.5 as against 91.5 July 1, 1905.

To avoid misapprehension it may be well to remember that any reports of corn yields under 75 bushels per acre are just now unfashionable here. The herd accepts 80 bushels as the standard, but the "Smart Set" in Wall Street, railway circles and in newspaperdom are noticing and wearing only the 100-bushel patterns, with an occasional extra 25 bushels applied—prominently.—Pope & Eckhardt Co., Chicago.

## CROP REPORTS

Maryland's corn crop is one of the largest for years.

Early corn is maturing in Arkansas and late-planted is improving.

Maine has a large crop of oats, the average yield being 40 to 50 bushels.

Corn in New England is slightly late, but a good crop is expected. Oats, wheat and barley have yielded well in this territory.

Thrashing returns show that the yield of oats in New York is not so heavy as was expected. Corn growth is retarded by cool nights.

J. P. Harrison, former president of the Texas Grain Dealers' Association, says the wheat harvest of the state is the poorest he ever saw.

The Burlington and U. P. crop reports quote 300,000,000 bushels of corn in Nebraska as an estimate of conservative grain dealers for 1905.

The Northwestern Grain Dealers' Association estimates the wheat crop of the Canadian Northwest this year at 90,000,000 bushels, and says it will grade largely Nos. 1 and 2. Last year the crop was about 60,000,000.

As a whole the corn crop of Iowa is doing well. Some early planted corn on well-drained land was cut early in the month. The crop will be safe from frost by September 20 to 25. Fall plowing and seeding are well under way.

Wheat is a poor yield in Oklahoma, but there is a good yield of oats. Early corn is being cut and the late is doing well. Plowing for wheat is well advanced and the ground in good condition. Some seeding has been done.

Jones and Inglis estimate the winter wheat crop at 370,000,000 bushels and the spring wheat at 242,000,000 bushels, with 12,000,000 bushels durum. They give the three northwestern states 166,000,000 bushels spring and 8,000,000 durum.

E. W. Wright, a Portland wheat expert, estimates the 1905-06 crop of wheat of the states of Oregon, Washington and Idaho as follows: Oregon, 12,400,000 bushels; Washington, 32,800,000; Idaho, 4,800,000 bushels. Grand total, 50,000,000.

The Kentucky September report summarized by C. A. King & Co. of Toledo makes the corn condition 101, the yield of wheat per acre 11 bushels, and the crop about 8,500,000 bushels, against 7,500,000 a year ago; oats yield, 26 bushels per acre; rye, 13.

Practically all corn in Illinois will be safe from frost by October 1, and a very considerable proportion of the crop will be out of danger a week or two earlier. The average date of killing frosts in this state is October 11 to 18, so that the outlook for a heavy yield is still favorable.

Corn in all sections of Indiana has made good progress toward maturity, the ears are large, the husks on the early planted are drying and cutting has begun in several of the southern counties. The prospects continue favorable for a heavy crop to mature before frost. Fall plowing is nearly finished and some seeding has been done.

Michigan report made wheat yield per acre 19 bushels, against eight bushels a year ago. Crop about 10,000,000 bushels, against 6,000,000 bushels a year ago. Quality, 91 per cent of average. Oat yield, 35 bushels per acre and clover seed 77 bushels, against 55 bushels a year ago.

C. A. King & Co., Toledo, say of Missouri: "September report makes the prospect there for a corn crop this year of 255,000,000 bushels. Last year state report made it 177,000,000, while the government made it 151,000,000 bushels. Indications of an increased wheat acreage being sown this fall."

Snow's crop report, based on returns of county agents, submitted September 1, made the condition of corn 88.7, and says the crop shows materially higher averages in the Ohio Valley, but a drop of 10 points in Kansas. The crop he puts at 2,500,000,000 to 2,600,000,000 bushels. The condition of spring wheat is reported at 86.2 and the yield 300,000,000 bushels, of which 205,000,000 bushels is credited to Minnesota and the Dakotas. Later returns of winter wheat, he says, fully maintain the preliminary indication of 440,000,000 bushels.

According to the Ohio state report, corn has advanced well and is maturing fast over most of the state, but the latest planted will not be ripe before the last of September or the first week in October. It is generally eared well, but the crop will be below the normal in the north. Oats in shock have been considerably damaged by rain in northern counties. The clover seed prospect is very poor; grasshoppers caused a good deal of damage to the crop in northwestern counties.

Plowing for wheat has progressed very well, and the ground is in good condition in most sections.

Wheat and oats in Kansas are yielding better than was expected, and the corn crop is in excellent condition. The corn acreage is 6,775,979, or 281,000 acres more than last year.

The condition of spring wheat, according to government figures, showed a deterioration of 1.9 points during August, and on September 1 was 87.3, compared with 86.2 last year. The figures suggest a crop of 261,000,000 bushels, 5,000,000 bushels less than that indicated in August, and 24,000,000 bushels larger than the final yield last year. The total wheat crop still foots up among the best crops this country has raised, the total being 685,000,000 bushels, 133,000,000 bushels larger than last year and larger than any crop in ten years, except in 1901. The crop in the three leading spring wheat states figures out 197,000,000 bushels. The condition of corn was .5 point better than the August figures at 89.5 and indicates a crop of 2,600,000,000 bushels, or the largest crop on record. The condition compares with 84.6 last year and a ten-year average of 81.7. The condition of oats was 90.3 at harvest, and using 36 bushels as par, the crop should be 899,500,000 bushels, 5,000,000 bushels larger than last year. A par of 35 bushels figures out 877,000,000 bushels, used by some statisticians. The barley condition was 89.8, against 89.5 the month before, and rye was 90.8, against 86.9 last year. Of the principal clover seed states, Illinois reports an increased acreage; Ohio, Utah, California and Colorado, no change, and the others decreases.

Indicated yields, with comparisons, follow:

	Estimated Sept., 1905.	Final Aug., 1905.	Crop, 1904.
Wheat, win.	424,000,000	424,000,000	325,000,000
Wheat, spr.	261,000,000	266,000,000	227,000,000
Total wheat	685,000,000	690,000,000	552,000,000
Corn	2,600,000,000	2,505,000,000	2,467,480,000
Oats	899,500,000	905,000,000	894,596,000
Rye	27,000,000	27,000,000	26,000,000
Barley	130,000,000	132,000,000	139,748,000

Following are the crops of the years named, 1905 being estimated:

	Wheat.	Corn.	Oats.
1905	685,000,000	2,600,000,000	899,500,000
1904	552,400,000	2,467,000,000	894,596,000
1903	637,821,000	2,244,000,000	784,094,000
1902	670,063,000	2,524,000,000	987,843,000
1901	748,460,000	1,523,000,000	736,809,000
1900	522,230,000	2,105,000,000	809,125,000

In the three leading spring wheat states the crop is estimated as follows:

Condition.	Yield, 1905.	Crop, 1904.
Minnesota	84	73,000,000
North Dakota	89	75,000,000
South Dakota	89	49,000,000

Totals ..... 197,000,000 153,792,000

The yields in the surplus corn states follow:

1905 bu.	1904 bu.	1903 bu.	
Ohio	194,000,000	190,000,000	88,000,000
Indiana	173,000,000	143,000,000	143,000,000
Illinois	351,000,000	344,000,000	264,000,000
Missouri	218,000,000	152,000,000	203,000,000
Kansas	230,000,000	135,000,000	172,000,000
Iowa	324,000,000	303,000,000	229,000,000
Nebraska	296,000,000	261,000,000	172,000,000

Totals ..... 1,696,000,000 1,438,000,000 1,271,000,000

The conditions of grain compared are as follows:

	Sept. 1.			10 Yr.	
	Sept. 1.	Aug. 1.	1904.	1903.	Aver.
Spring wheat	87.3	89.2	66.2	...	81.7
Corn	89.5	89.0	84.6	80.1	81.7
Oats	90.3	90.8	85.6	75.7	81.4
Barley	87.8	89.5	84.7	82.1	83.4
Rye	90.8	....	86.9	84.1	85.8

### AN IOWA MOSES.

Another bucket-shop having quit at Des Moines, the ninth within a year, leaving many mourners, a local paper, the Register, says:

Harry M. Talcott, for several years in the grain brokerage business in Des Moines, says that in a series of articles on the Board of Trade and bucket-shop operations he is going after them like Tom Lawson has gone after Amalgamated Copper. In his announcements Talcott says: "I am going to show how the sucker drops his money. How the long-wooled lambs are clipped and squeezed. Why a banker shoots himself after playing with this game. How the bucket-shops get our money without firearms or mask. How a thief that steals in at night can only secure so much. How the 'quotation foundry' operates and does business. Why you lose if you win. How they shuffle, cut and deal the cards, then telegraph you what your hand contains. How they secure bank references. How a postage stamp will start a bucket-shop; how a winning of \$20 will close its doors."

But hasn't Hill's "Gold Bricks of Speculation" already exhausted this field—so far as suckers will permit it to be exhausted?

Do you know what your insurance policy provides and requires? If not, read it and learn where you "are at."

### COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, L.L. B., of the Chicago Bar.]

#### Sale of "Dry-Weather" Wheat.

An indictment charged the obtaining of money by false and fraudulent representations in the sale of certain wheat as "dry weather" wheat, etc. But the Court of Criminal Appeals of Texas does not think that the indictment charged any offense against the laws of that state. It says (Curtis vs. State, 88 Southwestern Reporter, 236) that, as to whether the wheat sold was dry weather wheat was more a question of opinion than a statement of fact. As to whether it would stand the drought better than the other wheat was also a question of opinion. Furthermore, as to whether said wheat was superior to that raised in Collin County was a question of opinion. While, as the state insisted, it was reprehensible for the accused to sell wheat that was not raised as he stated, yet under no state of facts does the court think the allegations of the indictment authorized a prosecution under the swindling statute.

#### Responsibility for Safety of Scaffolding Used in Elevator Construction.

The Supreme Court of Minnesota says, in a personal injury case (Carlson vs. Haglin et al., 104 Northwestern Reporter, 297), that the defendants, while reconstructing five elevator bins, employed 130 men for that purpose, and sought to accomplish the scheme by building inside concrete walls which were to be raised to a height of 108 feet, three feet thereof being built at a time. This work required a scaffolding to be erected in accordance with plans furnished, to be put together by the men from material provided by the employer, which was to be lifted at intervals by means of tackle, pulleys and ropes from above. This platform rested upon supports, and continued to remain the same structure but for the temporary lifting from time to time. Upon this platform a heavy box rested, containing concrete, and sustained a number of men who stood thereon, which tended to increase the strain upon it. When the platform had reached, through the progress of the work, a height of over 70 feet, in making a necessary change and lifting the same, one of the supports, called "ledger boards," broke from defects therein, precipitating a number of the employees to the ground, some of whom were instantly killed.

The court holds, under the evidence, that the duty of the master in this case should have been necessarily controlled by the hazardous character of the work, which could not well be known or appreciated by the ordinary workmen engaged, and that the master's duty to furnish a reasonably safe place for his servants to perform their duties could not be avoided by allowing or authorizing any co-employees to select the material of which the scaffolding was to be constructed without making him a representative of the master, and hence that either by his appointment, or by inspection from time to time, or some other means to secure a reasonably safe place for the laborers to perform their work, the master was required to fulfill his obligation to his servants, and whether he did so in this case was a question of fact to be submitted to the jury.

It is unquestionably the duty of the master, the court says, to furnish a reasonably safe place for his servants to work. This is presumed, and should not be avoided; hence, if it is delegated, the master is responsible for the acts of his representatives, and, where the master furnishes material to construct the place and the risks are apparent and within ordinary comprehension or intelligent understanding of his servants, under such circumstances they necessarily assume the risks of the service; but where, as in this case, a plan is required for its development, or its dangers during progress, and advancement can only be within the contemplation of the master, it is unreasonable to say that common ordinary laborers, who have nothing to do with furnishing the plan or directing the work, must foresee or understand either the necessity of selecting proper material, or of inspecting it from time to time. Where serious but obscure dangers are involved, as here, it would be a palpable violation of all principles upon which the rule requiring the master to furnish a proper place for the servant to work rests to hold that the servants under such circumstances assumed risks which the master should perform as a personal and absolute duty.

It is often a question of fact whether a vice-

principal is required to perform the absolute duty or not; but where the facts are clear and the duty to furnish the proper place for the servant to work is plain, the duty of the master must be performed at his peril. He cannot absolve himself from it by leaving to any other servant the obligation of performing this duty for him. It seems very clear that the character of the structure in this case was such, and the dangers involved of that nature, that the duty to furnish the material could not be delegated absolutely to ordinary common laborers who were to use the same; and it is no excuse to say that, because some of the servants selected the materials which were to be used by others who might be changed from time to time, involving risks which none of such servants could anticipate, each and all of such fellow workmen were fellow servants of the other, and hence that all were absolved from any effort by the master to perform that which appears to the court very clearly to have been an absolute and personal duty of his, the failure to comply with which precipitated in an instant several men to their untimely death.

### RULES FOR WHEAT DOCKAGE.

The Washington Flour Millers' Association, acting in conjunction with the leading grain dealers and exporters, have formulated an agreement as to dockage for wheat, which will be adhered to this season. The regulations are as follows:

**Smutty Wheat.**—Where there is a large quantity of smut ball in the wheat, even if they are not broken, and the wheat has no indication of smut on the ends of the berries, it will be considered smutty wheat, because it cannot be handled in any way without smudging. The minimum discount for smutty wheat will be 5 cents per bushel, and from that up to 20 cents. If the wheat is free from foreign matter and without smut balls, but smudged on the end of the berry, even slightly, it will be considered smutty wheat.

**Off-Grade Wheat, Account Oats, Cockle, Chaff, Etc.**—This must be discounted as many pounds per bushel as there are pounds of foreign matter in the wheat. This to be arrived at by sifting. No allowance whatever to be made for screenings, as they are hardly worth on the average what the freight would be to the Coast, and if so the excess will no more than pay the expense of cleaning.

**Bluestem, Red Mixed or Club Mixed.**—The state grain inspection department will grade good bluestem No. 1, provided there is not more than 15 per cent of club or 10 per cent of red in it. If there is in excess of this amount and not 50 per cent of club or red in it, the lot should be discounted one-half the difference made between club and bluestem. For instance, if your limits are on the basis of 3 cents difference between these two wheats, the discount on the red or club mixed would be 1½ cents per bushel below bluestem value; if 4 cents, 2 cents below bluestem; if 5 cents, 2½ below. If there is in excess of 50 per cent of club or red in the bluestem, it must take club value.

**Red Wheat.**—Mainline or Big Bend red, which is not red Russian or of that nature, will be accepted at club value.

**Red Russian.**—This wheat must not be accepted on a lower basis than 3 cents below club; the same to be the case with any variety of this wheat. In some localities it is called "Jones Fife" and other names, but the wheat is identical; it is a yellow-bellied, starchy wheat, and is of very little value, and it will be discounted much more than this another year unless the farmers stop raising it.

**Club Red Mixed.**—If this is a Mainline variety of red it will be accepted on basis of club or red value, which is the same.

### THE LAST CROP YEAR AT MINNEAPOLIS.

The totals of the amount of grain received and shipped at Minneapolis for the crop year closing with August were published on September 4 by Secretary Rogers of the Minneapolis Chamber of Commerce. Following table shows the figures for the year just closed and the previous one:

Receipts—Bushels.	1904-05 Crop.	1903-04 Crop.
Wheat	89,081,700	85,139,130
Corn	4,685,610	3,912,090
Oats	22,969,240	25,057,710
Barley	12,920,750	12,249,040
Rye	1,580,390	1,786,430
Flax	7,122,740	8,216,970

Shipments—Bushels.	1904-05 Crop.	1903-04 Crop.
Wheat	24,112,230	17,153,160
Corn	693,200	757,020
Oats	10,513,170	13,572,220
Barley	8,108,890	8,727,850
Rye	976,290	1,115,860
Flax	2,362,930	3,347,600

## TRANSPORTATION

Ocean business is becoming very heavy again, all the boats to Europe going out with full cargoes.

The Pennsylvania lines have placed orders for 10,000 new freight cars, making 27,500 new cars ordered by that company within a year.

The Rock Island has announced a new rate from Iowa points to Kansas City, amounting to about 1 cent reduction, Des Moines to Kansas City.

The Illinois Central Railroad Co. has made arrangements for additional vessel service out of New Orleans in the interest of grain exporters.

The Illinois Central has made a new rate to Gulf export points, effective Monday, August 28, from Omaha and Council Bluffs. On wheat originating beyond these points the rate is 17½ cents and on coarse grains, including oats, corn, barley and rye, 16 cents.

Effective September 9, Western roads to Chicago have put into effect maximum rates from points east of and intermediate with Omaha, Council Bluffs, St. Joseph, Atchison, Leavenworth and Kansas City, as follows: Wheat and products, 15 cents per 100 pounds; coarse grains and products, 14 cents per 100 pounds.

General reduction in grain rates to Minneapolis-St. Paul and Duluth took effect September 1, over all lines covering Western and Northern Minnesota, North Dakota and Eastern South Dakota. The cut ranges from half a cent a hundred on nearby points to 2 cents, with incidental cuts of 3 to 5 cents from certain sections.

On September 1 the Eastern lines advanced rates to a basis of 17½ cents, Chicago to New York, from 14½ cents on domestic grain and from 15 cents on grain products. Export grain was advanced from 13 to 15 cents. Effective September 20, the rate on export grain products will be advanced, Chicago to New York, from 14 to 15 cents.

The Kansas City railway pool has been broken up, and for the first time in many years shippers, grain dealers and millers will now have the right to control the movement of their own property. Hitherto the manager of the pool directed the routing of grain, etc., to suit the pool, paying not the slightest attention to the wishes or instructions of shippers. The roads have now avoided prosecution by abandoning the pool, although some shippers profess to believe that it will be revived before long.

New rates on grain effective in the West and Southwest on October 1 are: Missouri River to Chicago, proportional, wheat 11 cents and corn 10; Missouri River to St. Louis, proportional, wheat 8 and corn 7; Kansas City to Minneapolis, proportional, wheat 11½ and corn 10½; Omaha to Minneapolis, proportional, wheat 10 and corn 9; to New Orleans for export from Omaha, wheat 16¾ and corn 15¾; to New Orleans for export from Kansas City, wheat 15¼ and corn 14¼; Kansas City to Memphis, proportional, wheat 11½ and corn 10½, and Omaha to Memphis, proportional, wheat 13 and corn 12. It is agreed, moreover, that only one elevator allowance of 1¼ cents a hundred pounds may be made by any road. These rates are a slight advance over the superseded rates, but a reduction from the former rates.

Since the amalgamation of the C. H. & D. and the Pere Marquette all grain originating on the C. H. & D. and lines controlled by the Pere Marquette is forced via Suspension Bridge, causing loss of business to Buffalo and more serious inconvenience to Ohio shippers. The Pere Marquette has no facilities for transferring and weighing grain at Suspension Bridge under the supervision of the Chamber of Commerce weighmaster; nor is it convenient to get cars inspected there without delay. The Pere Marquette's differentials also are against shippers, being about 2 cents per hundred-weight more than grain originating on other roads. The bulk of the grain received at Buffalo can be reconsigned to Philadelphia points, for instance, at 3½ cents per hundredweight over the Buffalo rate, while the C. H. & D. rates are 5½ cents per hundredweight over the Buffalo rate to Philadelphia, and in order to meet competition the shipper must equalize this difference in rates in his prices. This action of the new management is entirely arbitrary and has caused a strong protest from all C. H. & D. shippers.

Modern Miller (St. Louis) hastens to tell the world that "an unusual demand appears for grain drills and fertilizers, indicating a large area in winter crops." Reminds one of the story current awhile ago in Kansas of a boss grasshopper that on a Sunday took down the shutters and looked

over the books of a country store to learn the names of those to whom seed has been sold, so as to expedite "raids" with increased neatness and dispatch.—Pope & Eckhardt Co., Chicago.

The mathematic freak has estimated that the year's crop of grain will require 1,500,000 cars to move it, equal to a single solid train 11,931 miles long, exclusive of the locomotives that would be necessary to move it. Dividing this into trains of forty cars each, there would be required 37,500 locomotives or 355 miles of draught machinery. Adding this 355 miles to the 11,931 miles of cars, there is a total of 12,286 miles. So now we understand why cars are going to be shy next winter.

## OBITUARY

J. E. Teasdale, head of the grain firm of J. E. Teasdale & Co., St. Louis, Mo., died recently.

I. M. Hutches, a member of the Edwards-Wood Co., St. Paul, died at Mason City, Iowa, on September 8, aged 55 years.

Jacob Nevius, a well-known grain and flour dealer of Trenton, N. J., dropped dead in his store in that city on September 2. He was prominent in lodge circles.

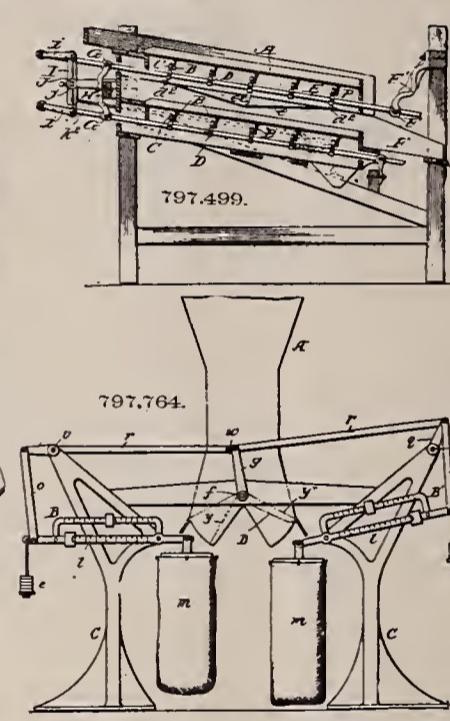
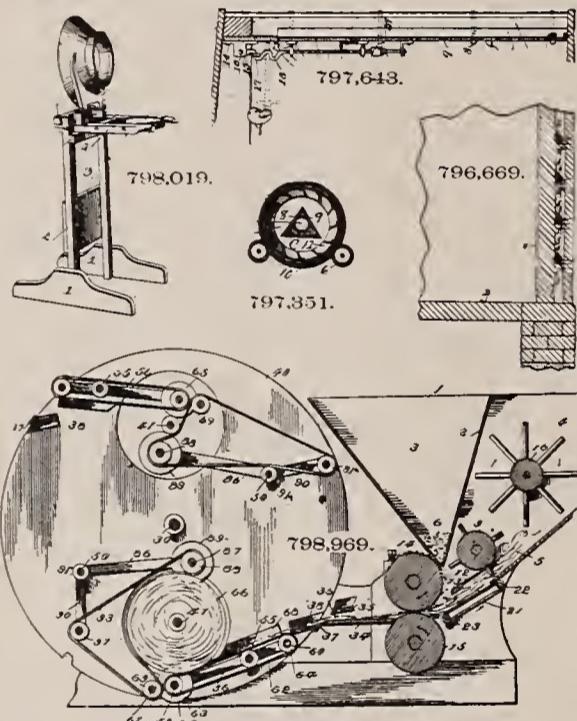
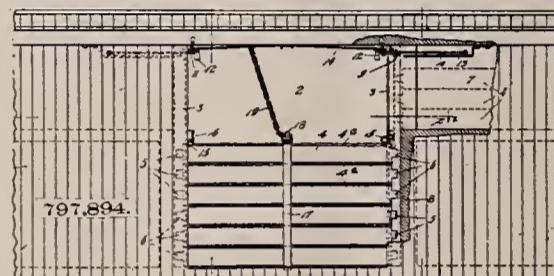
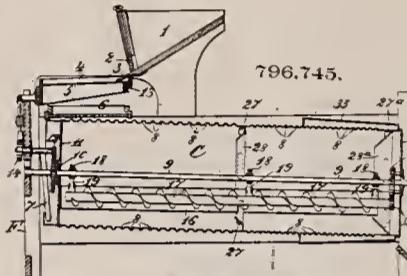
John Prizer, a grain dealer of Spring City, Pa., died at Pottstown on September 7. He was taken ill on a train and was removed to the Pottstown Hospital in an ambulance.

Rensselaer D. Hubbard, a member of the Chicago Board of Trade, the Milwaukee Chamber of Commerce, and prominently identified with the grain and milling trade of the Northwest, died suddenly in Chicago on August 29. Mr. Hubbard, whose home was at Mankato, Minn., was 58 years

## LATE PATENTS

Issued on August 8, 1905.

Grain Storage Tank.—Allan G. Mather and William L. Dethloff, Milwaukee, Wis. Filed August 18, 1904. No. 796,669. See cut.



Grain Sorter.—Hilaire E. Marot, Niort, France. Filed January 12, 1905. No. 796,745. See cut.

Issued on August 15, 1905.

Conveying Mechanism.—Clarence W. Crosby, Chicago, Ill. Filed February 3, 1903. No. 797,100.

Grain Drying Apparatus.—Carl P. Friese, Chicago, Ill. Filed November 12, 1904. No. 797,351. See cut.

Grain Sieve Cleaner.—John B. Cornwall, Moline, Ill., assignor to the Barnard & Leas Manufacturing Co., Moline, Ill. Filed January 8, 1904. No. 797,499. See cut.

Issued on August 22, 1905.

Grain Door for Freight Cars.—Ludwig A. Thorson, Melvin, Minn. Filed May 13, 1905. No. 797,643. See cut.

Automatic Weighing and Bagging Machine.—Robert D. Webb, Minden, La. Filed December 31, 1904. No. 797,764. See cut.

Grain Door for Cars.—John Iverson, Minneapolis, Minn. Filed March 6, 1905. No. 797,894. See cut.

Bag Holder.—Arthur Deuel, Wayland, Mich., assignor of one-half to Edward S. Fitch, Wayland, Mich. Filed November 1, 1904. No. 798,019. See cut.

Issued on September 5, 1905.

Wagon Scale.—Benjamin T. McDonald Jr. and James M. McDonald, Pleasant Hill, Mo. Filed June 30, 1904. No. 798,693.

Machine for Reeling Edible Fibrous Material and Grain.—Melchoir L. Luebben, Sutton, Neb., assignor to the Luebben Baler Co., Lincoln, Neb. Filed June 11, 1903. Renewed March 22, 1905. No. 798,969. See cut.

old. He was a frequent visitor to this city and was well known in the grain trade throughout the country.

John Gilbertson, for many years in the grain business at Brooklyn, N. Y., and a former president of the Brooklyn City Board of Elections, died at his home in that city on September 5. He was born in Newark, N. J., in 1840. He leaves a widow and one daughter.

Charles Campbell Sanderson of Dedham, Mass., died August 23, after a brief illness. He had been engaged in the grain and hay business for some time. The deceased was born in Sweden, Me., on April 13, 1826, and removed to Dedham in 1871. He was twice married and leaves a widow and one daughter.

Hail Storms, senior member of the grain firm of Storms & Smith, Carmi, Ill., died on August 24, at a sanitarium in Evansville, Ind. Mr. Storms was born in Carmi on March 29, 1838, and had been a lifetime resident of that town. In addition to his grain business he was interested in farming and was owner of considerable country and town property. He was county surveyor for several years and sheriff for four years.

George Milmine, head of the grain firm of Milmine, Bodman & Co., Chicago and New York, died August 14 in his seventy-sixth year. Mr. Milmine founded the house in Baltimore in the early days of the grain trade at that port. Later the head office was transferred to New York and a branch established at Chicago. The firm soon assumed a commanding position in the grain trade, which it has since maintained. Mr. Milmine was a man of unassuming character, but was endowed with sterling qualities which made him respected wher-

ever he was known in the grain markets of the country. Although he still retained his interest in the firm at the time of his death, he had not been engaged actively in business for the past few years.

Benj. F. Elbert, a prominent resident of Des Moines, Iowa, and engaged in the grain brokerage business in that city, met death by accidental drowning on August 23. The accident occurred near the south approach of the North River bridge, 2½ miles south of Fort Des Moines, and Mr. Elbert was last seen alive one mile from where the body was found. The deceased was born in Van Buren County, Iowa, May 8, 1844. He was a student at the Northwestern University when the Civil War opened and left college to join the army. He was a resident of Albia for 20 years and was cashier of the bank in that city, and after removing to Des Moines retained stock in the institution. Mr. Elbert engaged in the grain brokerage business shortly after removing to Des Moines and had been very successful in the trade. He was interested in large land deals and at the time of his death owned a 1,700-acre farm near Valley Junction, which he had been stocking with fine cattle. Mr. Elbert was about to retire from active business. For the past year his son, Hoyt Elbert, has been associated with his father in the grain brokerage business, and the senior Mr. Elbert was gradually turning the work over to the younger man. Mr. Elbert is survived by his wife and five children.

## FOREIGN NEWS

The Liverpool City Council has asked the Dock Board to abolish the preferential rates given grain cargoes at Birkenhead as opposed to Liverpool proper.

After thirty-two years of connection with "Dornbusch," Samuel Woods has retired, his successor being John Holland, who has been with the business for thirty-five years.

Mexico has imported but little wheat since the reduction of duty a few weeks ago. It is believed in the Southwest that Mexican millers are waiting for the removal of all of it.

Greece will tax imported wheat at the rate of about 5 cents per bushel, for both revenue and protection. Thessaly is the leading wheat province of Greece, producing from 2,500,000 to 4,000,000 bushels per annum.

The American consul-general at Cape Town reports a poor demand for mealie (corn) meal at \$3.89 to \$4.01 per 100 pounds. First arrivals of new native corn were sold at \$1.82 per 100 pounds, with American horsetooth offered at \$1.70.

A statement of the crop of wheat in 72 Russian governments, as obtained from returns published by the "Central Statistical Committee" of the Russian government, is as follows, reduced to bushels:

1904.	1903.	1902.
Winter wheat...205,460,800	199,707,200	222,298,400
Spring wheat...459,208,000	419,839,600	385,910,400

The province of Damascus of Asiatic Turkey will by the end of this year be in direct railway connection with two ports on the Mediterranean (Beirut and Haifa); with the Hauran, one of the finest grain producing districts in the near East, by two lines; and will possess a line running through some of the richest agricultural and pastoral districts in Northern Syria to Aleppo, one of the most important trade distributing centers in the empire. Imports into Damascus during the year 1904 included: Rice, 42,000 cwts.; sacks, 200,000; sacking, 100 bales. Exports included: Barley, 165,000 bushels; wheat, 150,000 bushels; chickpeas, 10,000 bushels.

A recent inquiry into the transportation of grain in Argentina by the government discloses the fact that the private storage capacity existing in the agricultural zone is 1,714,390 cubic tons. The capacity of the sheds and shelters of the railways in the same zone, according to the Public Works Department, is 1,721,898 tons. Add to these the carrying capacity of the rolling stock of the railways, about 500,000 tons, and there is 3,936,288 tons as the total within which the movement of grain can be carried out. The port of Buenos Aires is able to embark 2,000,000 tons of cereals per annum; La Plata, 1,000,000 tons; Rosario, 2,000,000 tons; Bahia Blanca (with its present facilities), 120,000 tons a month, or 1,440,000 tons per annum; Santa Fe, 1,750 tons daily or 546,000 tons per annum, and the other ports of minor importance, about 1,000,000 tons per annum. This gives the result that the ports of the republic, in normal conditions, with sufficient shipping freight available, and a regular movement

of grain, are able to deal with 8,000,000 tons of cereals per annum, a total which has never yet been reached.

A Hamburg grain man has taken up the "certificate final" question in Germany, and "seconds the motion" of the National Association of British and Irish Millers that this condition of American exporters' contracts be abrogated; in other words, "that all contracts containing this clause be sent back."

It is said by a recent cable from Odessa that the Russian export grain trade has been stopped by lack of motive power on the railroads, the government having retained all the locomotives to move troops. Many thousands of carloads of grain have accumulated along the southern lines, and all the warehouses are overflowing with grain awaiting transport to the sea. Exporters will sustain heavy losses owing to their inability to fulfill engagements. The London Standard says, however, that the real secret of Odessa's decline is the competition of other Black Sea ports, like Nicolaiev and Kherson, which are flourishing largely at the expense of Odessa, and it is possible that between them the Bug and Dnieper ports will, within the next few years, relegate Odessa to the position of a second-class emporium.

### STACKING WHEAT BEFORE THRASHING.

The many advantages of stacking wheat as soon as possible after shocking are so obvious that its practice should be universal, but in parts of the West the custom has grown up to let the grain remain in shock till the thrashing can be done and then haul direct to the machine. The stacking expense is thus saved, but the loss by shelling is much greater, and rotting of the butts of the sheaves often causes a mustiness that injures the whole of the grain when sold or stored. The hauling expense is also often greater at thrashing time, writes a Missouri farmer to the Country Gentleman. "Wheat that has no chance to sweat (ferment) in the stack will ferment in the granary, and is often greatly damaged by the excessive heating that takes place when dense bulks of new grain are put in the storehouse."

The writer adds that an even greater loss is the inability to fall plow, with the consequent loss of fertility next season; and he believes that the agricultural colleges and experiment stations should encourage stacking by teaching the art of making a good stack, an accomplishment of the old-time farmer that is growing less and less common.

### SOME ANCIENT WHEAT.

The Armour Elevator Company bid in on September 2 4,961 bushels of wheat that has been in storage in their elevators since 1892. The price paid for the wheat was the current rate of that day. E. P. Bacon & Co. held the original storage certificates, but never have presented them. The storage charges against this wheat now amount to \$1.25 a bushel, but for fear the holders of the original certificates might some day turn up and demand the grain and pay the indebtedness the Armour filed a \$10,000 bond with the state grain inspection department, thus protecting it from any possible future claims.

"About this 4,000 bushels of wheat clings something of a romance," says the Chicago Evening Post. "It was delivered to the Armour Elevator Company in October, 1892, in the heyday of the prosperity of the opening World's Fair period. Philip D. Armour was living then, and Joe Leiter was a young fellow looking after his father's rent rolls and office buildings. For some reason unknown at the present time the original owners of the wheat never called for it. It lay unnoticed in the elevator until Mr. Leiter began the engineering of his famous deal that sent wheat above the dollar mark.

"Then Armour senior, skirmishing the country for every bushel of wheat that he could lay hands on in order to break the 'bull' movement, discovered among other hidden stores this small treasure. His tugs were bucking ice in Duluth harbor to get grain boats out for Chicago and his railway trains were rushing into Chicago with other cargoes, but he needed more. The 4,900 bushels would have been used in a legal way if the situation had become too desperate, but was passed by when the Leiter failure was announced. Since then, losing all its outer husk, and becoming through frequent handling only fit for a German army biscuit, the ignored grain has lain dormant in the elevators."

During the following week it was taken out and sent to a destination that would convert it into food. The heart of the grain was reported in good condition.

## THE CO-OPERATIVES

The farmers' elevator company at Weston, Ill., and Mayville, N. D., paid 10 per cent dividends last crop year.

The Milan Farmers' Elevator Co., Milan, Minn., will try to sell \$500 of stock to pay debts on the company's elevator.

The farmers' elevator at Morris, Minn., has been sold to S. Stewart. Last crop year the company made \$123.64 on a business of \$82,000.

The farmers' elevator at Hoffman, Minn., has been rented to a certain party, but the former lessees are in possession and seem inclined to stay so.

J. S. McDonald of Rush City, Minn., has resigned the secretaryship of the Minnesota Farmers' Exchange and has been succeeded by L. K. Myers of North Dakota.

The farmers' elevator companies at Weston, Ill., is for rent, the lessee to enter into bond that he will maintain prices at a margin not to exceed 10 cents under Minneapolis.

The Mower County Farmers' Co-operative Elevator, Coal and Live Stock Co. has decided not to attempt to go into the business of buying grain at Austin, Minn., but will handle coal.

### NEW YORK HOPEFUL.

The new rule on the New York Produce Exchange, permitting contracts for future deliveries of grain to be made for 1,000 bushels or multiples thereof, in effect July 15, has had a stimulating effect on trading at that exchange. While the increase in speculative deals might have been anticipated, for obvious reasons, the Commercial Bulletin says that is the really surprising phenomenon arising from the action of the rule in practice.

"The main purpose of the change in the grain rules was not so much that of increasing speculative trading on the Exchange as of attracting grain to New York by giving farmers and the smaller interior dealers facilities for shipping single cars of grain (1,000 bushels) to New York and immediately selling by telegraph against their shipments if they so desired. The sudden increase in speculative interest as a result of the change has therefore been considerable of a surprise, but there is every indication that it will continue. It will create in New York, it is expected, a permanent market that will enable the smaller dealers and traders to enjoy the same privileges as those trading in larger lots.

"It is well known that farmers sell to smaller dealers first and that these smaller dealers, after taking out their profits, sell to other middlemen, and so on, the carloads of the farmer up to the time they reach the larger operators, who assemble carlots and then consolidate them into cargo lots, in which there is quite a profit. The intention of making the option market cover carlots is to enable the farmer to obtain nearer the market value for his goods; and the belief is that as soon as this is brought to his attention and to the attention of the smaller dealer they will see the advantage of sending the goods to this market."

The new rules provide that the trading in 5,000-bushel lots shall be carried on in the old ring in the Exchange, as formerly, and the transactions in 1,000-bushel lots shall be conducted in a separate ring.

## OUR CALLERS

[We have received calls from the following gentlemen prominently connected with the grain and elevator interests during the month.]

- B. H. Stahr, Pullman, Ill.
- L. Hutchinson, Joliet, Ill.
- Wm. A. Bell, Millbrig, Ill.
- Fred Freer, New York City.
- Jno. Stevenson, St. Jacob, Ill.
- Frank Elson, Magnolia, Ohio.
- W. W. Southgate, Saginaw, Mich.
- D. F. Stump, Grand Rapids, Ohio.
- C. G. Hammond, Huntley Mfg. Co., Silver Creek, N. Y.
- J. D. Shanahan, chief grain inspector, Buffalo, N. Y.
- W. L. Richeson, chief grain inspector, New Orleans, La.
- G. W. Strong, secretary Illinois Grain Dealers' Association, Pontiac, Ill.
- J. E. Gambrill, Green Camp, Ohio, representing Sprout, Waldron & Co., Muncy, Pa.

## SEEDS

Flax in North Dakota is going 15 to 20 bushels to the acre.

C. H. Craver, of the seed firm of C. H. Craver & Co., Binghamton, N. Y., is reported deceased.

It is expected to have the new seed elevator of the Sioux Seed Co., at Alpena, Mich., in operation this fall.

The Des Moines Seed Co. of Des Moines, Iowa, has reincorporated, the original articles of incorporation, which were for 20 years, having expired.

It is announced that traders in flaxseed on the Duluth Board of Trade have taken steps to petition the State Board of Grain Appeals to change the grade on No. 1 Flaxseed, reducing the amount of field damaged seed allowable from 25 to 20 per cent.

The Nebraska Seed Co. will erect a new brick warehouse on Jones Street, between Twelfth and Thirteenth, in Omaha, Neb. It will be three stories high, 66x72 feet, and its construction will also allow additional stories when needed. The building and equipment will cost about \$25,000.

The Albert Dickinson Co. of Chicago and Minneapolis will enlarge its seed plant at Dearborn Street and Twenty-fifth Avenue, S. E., Minneapolis, with several new buildings, for which permits were issued on August 21. The company, which is one of the oldest in its line in the country, opened its Minneapolis branch in 1900. Two years later the purchase was made of 240 feet of trackage, upon which the plant stands. The same year Warehouses Nos. 1 and 2 and Elevator No. 3 were built. Elevator No. 4, which will be the largest building in the plant, is now under way, and Warehouse No. 5 is to be built at once. The company also intends building a frame grinding house and corn crib. The new elevator will be 48x99 feet and 140 feet high. It will be of frame construction and will cost \$10,000. The warehouse will be two stories high and will be built of brick, at a cost of \$5,000. The several additions, exclusive of machinery, will cost \$16,600.

J. F. Zahm & Co. of Toledo, Ohio, in their daily market letter, from time to time make suggestions relative to the handling and marketing of clover seed which are of inestimable value to the country shipper. From recent circulars we extract the following: "What shall I pay the farmer for seed?" is what many shippers ask. Our answer is: Watch the sales of low grades, red clover, alsike and timothy, as reported in the Red Letter every day. A range is given on No. 2, No. 3, Rejected and N. E. G., and if shippers will buy the different grades on that basis, deducting freight and other charges, and their margins, they ought to come out all right. Some seed shippers send along the seed as fast as they buy it. They do not hold until they get a carload, and many doing this have come out better even though they paid less than carload rates of freight. Of course, if there's going to be an advancing market, it'll pay to hold until you get a carload, but the market is uncertain and shippers must simply take chances."

Relative to clover seed, C. A. King & Co. of Toledo, Ohio, say: "Crop reports mixed. Acreage large. Average crop possible. Unfavorable weather might reduce it to short one like last year. Outcome will be uncertain for several weeks. Speculation will control in the meantime. Some scattered shorts covered this week. Largest shorts and leading longs still stubborn. Outstanding deals about the same as year ago. There is always some shortage until the crop moves. Prices have advanced nearly dollar from lowest. They are still over dollar less than year ago, when they hit 7.85 in August for October, the highest price of the season. Foreigners were long then. They have been indifferent this season. They are talking about large Russian and English crops and fair prospect in France. Chili has less than year ago. Canada has favorable prospect. Some of the smaller states look better than part of the large. Crop is late. August receipts here be trifle less than 1,000 bags. They were only 500 bags from the enormous crop in 1897, but the September receipts that year were 39,500 and October 56,000, the largest ever known. Last year the August receipts were 730 bags; September 11,300 and October 26,000. Two years ago August receipts were 2,000 bags, 14,000 in September and 40,500 in October. August receipts were 1,200 in 1902 and 1,500 in 1901. October is always the big month. Only exception was in 1902, when November was a trifle larger."

## For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

### MONEY IN YOUR POCKET.

If you want to change that second-hand machine into money advertise it in this department. Or if you have a grain elevator to sell or rent, or wish to buy, make your wants known through these columns.

## ELEVATORS

### FOR SALE.

Four modern elevators in Minnesota, on the Omaha Railway. Good territory and in first-class condition. Address

MINNESOTA, Box 9, care "American Elevator and Grain Trade," Chicago, Ill.

### FOR SALE.

Two modern elevators, one in Minnesota, one in Iowa. Well located; easy competition, with splendid crop prospects. Inquire

81 CHAMBER OF COMMERCE, Minneapolis, Minn.

### FOR SALE.

Elevator on Erie Railroad in good grain country, 14,000 bushels' capacity; 20-horsepower gasoline engine; feed mill; corn sheller; Monarch Separator; all in good condition. Address

ROBERT KOLTER, Spencerville, Ohio.

### THREE SMALL ELEVATORS.

For sale on Chicago Great Western Railway, Southern Minnesota. Well located, gasoline power, dump scales, and at stations with only one competitor. Will sell separately or together. Address

THE JOHN MILLER CO., Chamber of Commerce, Minneapolis, Minn.

### FOR SALE.

Elevator in the corn and oat belt of Iowa. Cribbed house, capacity 80,000 bushels; good cribs for 20,000 bushels ear corn; 5 acres of land. Also handles coal, feed, tile and all building material except lumber. Big crop to handle this year. Price, \$12,000. Doing a profitable business. Reason for selling, poor health. Address

IOWA, Box 9, care "American Elevator and Grain Trade," Chicago, Ill.

## GRAIN AND SEEDS

### FEED FOR SALE.

Alfalfa meal for horses, cows and hogs, \$12 per ton; fine and extra green, \$14 per ton, f. o. b.

WISE ELEVATOR, Canfield, Colo.

## MACHINERY

### FOR SALE.

New Columbia Gasoline Engine, 20 horsepower, as good as new; must be sold; have no use for it. Address

STEGE BROS., Matteson, Ill.

### FOR SALE.

One 15-horsepower Rice Automatic Steam Engine and one 10-horsepower White & Middleton Gas or Gasoline Engine. Also two 66x16 split wood pulleys, iron hubs. All in first-class condition.

W. E. TUTTLE, 153 South Desplaines St., Chicago.

## ENGINES FOR SALE.

One 6-horsepower Ohio Motor Gas Engine, with all connections; first-class condition, \$225. One 6-horsepower Coffield Gas Engine, complete, \$150. Address

A. T. FERRELL & CO., Saginaw, Mich.

### FOR SALE.

At bargain prices, one Webster 6½-horsepower, one Lewis 8-horsepower and one Model 12-horsepower. All for gasoline and in good condition. Write for price and full particulars. Address

J. F. ATHERTON & CO., 30 S. Canal St., Chicago, Ill.

### FOR SALE.

Seed cleaning machine, large Invincible Seed Cleaner, 35 screens, sufficient for grain and seeds of all kinds. In good condition, and to make room for some changes will offer it at a bargain. Let us hear from you.

A. A. BERRY SEED CO., Box 114, Clarinda, Iowa.

### FOR SALE.

The Interstate Elevator Co. having decided to equip their Erie Elevator at Chicago with electric power, we offer for sale their steam plant as follows:

Three vertical 125-horsepower Manning Boilers.

One self-supporting steel stack, 5 feet diameter, 125 feet high.

One pair 16½x27-inch Automatic Buckeye Engines.

Two boiler feed pumps.

One feed water heater.

One steam-driven fire pump.

One K. W. 115-volt generator, direct connected to Ideal Automatic Engine.

There is also a line shaft about 120 feet long, running from 5 15-16 in. to 3 15-16 in., together with a large number of bracket post hangers, rope drives, complete to clippers and separators; also one large car puller, capable of pulling twenty loaded cars.

The machinery is all in first-class condition, having been run only six years; rope transmission, shafting, etc., made by Webster Mfg. Co., Chicago. Address

STEPHENS & TYLER, Monadnock Block, Chicago.

### FOR SALE.

Columbus Gasoline Engine, 25-horsepower, but little used, good as new. Will be sold at a bargain. We have all sizes new and second-hand engines and are always ready to exchange or sell at low figures for cash.

WALLACE MACHINERY CO., Champaign, Ill.

### FOR SALE.

Otto Gas or Gasoline Engine, 38 horsepower, good as new, but too small; now being replaced by 75-horsepower engine. Will sell cheap for cash, or a little cash and balance on time, payments to suit. Address

THE H. L. STRONG GRAIN CO., Kansas City, Mo.

## SCALES

### SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

### "THE STANDARD" SCALES.

For all purposes. Portable, Wagon, Hopper and Track Scales. Guaranteed durable and accurate; quality higher than price. Not in the trust.

THE STANDARD SCALE & SUPPLY CO., Station U., Chicago, Ill.

## Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

### WANTED.

Highest cash price paid for scrap iron; also second-hand steam and gasoline engines, boilers, pulleys, shears, etc.

BURRELL MFG. CO., Bradley, Ill.

### MAKE YOUR WANT KNOWN.

There are few mind readers and when you want to convey an idea to a grain shipper or receiver it's best to either put it in type or shout it at him. The "American Elevator and Grain Trade" reaches a large class of readers who will read your wishes if you have them put in type in these columns.

### SITUATIONS WANTED

#### SITUATION WANTED.

By young man experienced in grain, coal and lumber business; good references. Address

F. R. J., Box 17, Fontanelle, Iowa.

### GRAIN WANTED

#### GRAIN WANTED.

Wanted—Feed barley and new No. 2 and No. 3 rye.

W. H. SMALL & CO., Evansville, Ind.

#### SEEDS WANTED.

We want to buy several cars of timothy, clover, red top, orchard and blue grass. Will buy in lots of from ten bags to carload. Send samples and quote, giving freight rate and stating quantity offered.

JAS. L. VANCE & CO., Chilhowie, Va.

### HAY WANTED.

#### SPECIAL FACILITIES.

For handling clover mixed hay. Write for market quotations and billing instructions.

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#### FOR GOOD RESULTS.

Ship us your next consignment of hay and straw.

R. F. MORROW COMMISSION CO., Chicago.

#### GOOD HAY.

Will bring a good price on our market. Send us your next consignment. Our specialty.

ST. LOUIS HAY & GRAIN CO., St. Louis, Mo.

### FOR SALE

Paxton Mill,	Harrisburg, Pa.	1,200 bbls.
Swartley Mill,	Doylestown, Pa.	120 "
Mingle-Fulmor Mill,	Hatboro, Pa.	100 "
Gochnauer Mill,	Boiling Springs, Pa.	100 "
Columbia Mill,	Columbia, Pa.	150 "
Loucks-Codorus Mill,	York, Pa.	125 "
Freed Mill,	North Wales, Pa.	100 "

C. H. DEMPWOLF, YORK, PA.

ESTABLISHED 1886

### Flour and Wheat Testing.

Howard's Wheat and Flour Testing Laboratory furnishes quick and accurate practical tests of wheat and flour.

Daily Comparative Baking Tests in comparison with the leading mills of the United States and Canada, Wheat Milling Tests and Chemical Analyses at prices within reach of any miller.

Schedule of rates and terms, including list of various tests, sent on application.

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SUCCESSORS TO

D. G. Stewart and Geidel & Co.

PITTSBURG, PA.

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Proprietors Iron City Grain Elevator

CONSIGNMENTS SOLICITED

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Grain Exchange Building, Cor. Penn Ave. and Tenth St., Pittsburgh, Pa.

Established 1878

#### Wholesale Grain, Hay and Mill Feed

CONSIGNMENTS SOLICITED

References: The Colonial Trust Co., Pittsburgh, Pa.



The Best Market in the World

Our superior facilities and connections with large buyers of HAY and GRAIN enable us to get the best prices. Liberal advances made on shipments.

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Reference, Monongahela National Bank

#### HARDMAN & HECK

Room 303, Second Nat. Bank Bldg., PITTSBURG, PA.

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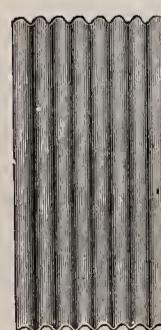
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Corrugated Iron and Metal Roofing For Grain Elevators

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G. C. HOLSTEIN, Sec'y-Treas.

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29 Chamber of Commerce

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Sample Grain a Specialty

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ESTABLISHED 1864

#### I. H. LOWRY & CO.

64 Mitchell Building, MILWAUKEE, WIS.

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Branch Offices at CHICAGO, MINNEAPOLIS

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A. E. O'DONNELL

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Ask for our Bids and Quotations.

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We handle Beans, Barley, Rye, Corn, Wheat. Try us. Liberal advances.

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Your questions fully and cheerfully answered; particular attention paid to timothy seed and grain by sample. Consignments and speculative orders receive our careful personal attention.

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"They're Running Mates"

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Write for our Daily Market Letter.

Your interests are our interests.

Special attention given to cash  
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 Orders in futures carefully executed.  
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 All business transacted through and confirmed by Milmine, Bodman & Co.

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ESTABLISHED 1846

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SPECIAL MARKET AND CROP REPORTS FREE

BE FRIENDLY

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## J. F. ZAHM & CO. GRAIN and SEEDS TOLEDO, OHIO

Handling consignments and filling orders for futures

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SEND FOR OUR DAILY CIRCULAR; IT'S FREE

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We buy delivered either of these points, or f. o. b. your stations. Fireproof elevators and seed houses. Unlimited storage capacity for grain and seed. Storage capacity, 6,000,000. Unloading capacity, 300 cars daily. Clipping Capacity, 175,000 Daily. We trade in futures.

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OF WHEAT, CORN, OATS AND RYEOn account of the peculiar character of the season, grain  
is largely off grade and we advise consignments.

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## GRAIN HAY

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KANSAS CITY, MO.

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We sell on Commission and buy direct.

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Storage capacity 8,000 bales, 30,000 bushels.  
Let us know what you have to offer.

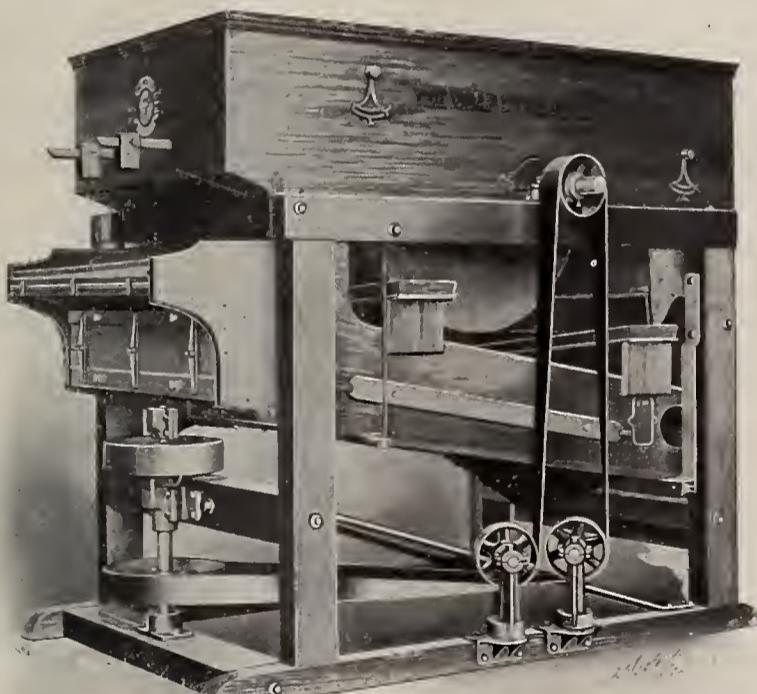
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Before you lay down this paper drop a line to our nearest agent.



## The "Imperial" Gyratory Receiving Separator

cleans the grain much better than other separators.

Ours is the only separator on the market having the gyratory motion, and it requires less power than other separators.

After once started the weight in the balance wheel is so nicely adjusted that the machine practically runs itself. In economy of power this machine is one of the biggest money-savers that a miller or elevator man can get.

In discharging grain from feed box to scalping shoe it is subjected to an air separation by fan, thus lifting out screenings, which are deposited into head tip, conveyed to side of machine and discharged; a second separation is made in trunk as grain passes over tail of screen previous to being discharged to elevator.

**The Wolf Company**  
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PACIFIC COAST DEPARTMENT: 323 Alisky Bldg., Portland, Oregon

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at short rates means from 20 to 140 per cent more than the pro-rata cost for the same length of time. Such an extra charge is a heavy load for the accommodation of a short term policy.

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With The



That company will not charge over pro rata, and for policies held longer than three months, makes an increasing dividend.

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Oldest Flour Mill Mutual in America

SAVED TO MEMBERS  
OVER \$1,300,000

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It is a Mutual Company which insures more mills and grain elevators than any other company in the United States.

It has been in business 27 years and its average annual cost for insurance to mutual policyholders has been about one-half of the board rates of stock companies.

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Good, but cheap, insurance on Elevators,  
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We make a specialty of writing Grain  
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A. R. MCKINNEY, Secretary.

H. D. CUMMINGS & CO.,  
159 La Salle Street, Chicago Agents.

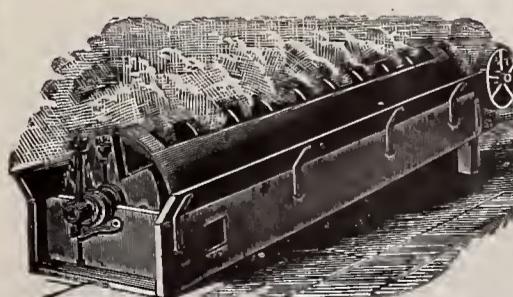
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American Elevator  
and Grain Trade  
FOR ONE YEAR

## Insurance on Elevators and Grain!

During 23 Years of Successful Business We Have Furnished  
Our Members the Most Reliable Insurance at about Half the Rates  
which Stock Insurance Companies have charged during the same period.

We Have--Paid Losses \$1,000,000.00. Total Assets \$1,250,000.00. Net Cash Surplus \$250,000.00.  
Michigan Millers Mutual Fire Insurance Co.  
OF LANSING, MICHIGAN.

WHY NOT USE  
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CUTLER  
STEAM  
DRYER,

Which is also a successful

Wheat Heater or Temperer  
or Dryer for Washed  
Wheat or Bran.

It leaves the Wheat in Perfect Condition for the Rolls. Will also dry  
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Not an Experiment. In successful use 25 years drying  
CORN MEAL AND HOMINY,  
BREWERS' GRITS AND MEAL,  
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ALSO SAND, COAL DUST, GRAPHITE AND CLAY AND ORE OF ALL KINDS!

Automatic in operation, requiring no attention. Double  
the capacity of any other Dryer sold for same price.

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ENGINEERS AND  
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650,000-Bushel Steel Elevator, under construction.  
This bin story was erected in 30 working days.

**Builders of Grain Elevators  
in Wood, Steel, Concrete or  
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ENGINEERS—GRAIN ELEVATOR BUILDERS

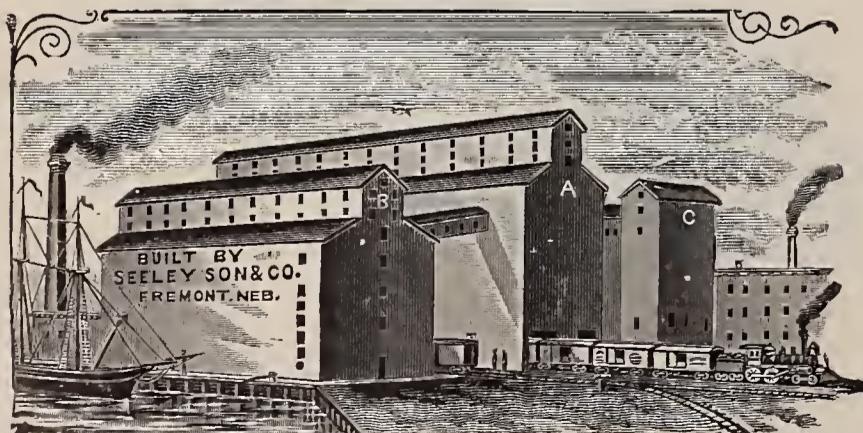
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Plans and Specifications.

619-623 The Temple, Chicago, Ill.

A partial list of elevators which have been designed and constructed by us and under our supervision.		Bushels.
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GRAND TRUNK ELEVATOR No. 3, Portland, Me.	1,500,000	
GRAND TRUNK ELEVATOR No. 2, Portland, Me.	1,000,000	
NORTHERN GRAIN CO., Manitowoc, Wis.	1,400,000	
BURLINGTON ELEVATOR, St. Louis, Mo.	1,300,000	
UNION ELEVATOR, East St. Louis, Ill.	1,100,000	
EXPORT ELEVATOR, Buffalo, N. Y.	1,000,000	
J. R. BOOTH ELEVATOR, Parry Sound, Canada	1,000,000	
CHESAPEAKE & OHIO RAILWAY ELEVATOR, Newport News, Va.	1,000,000	
SOUTHERN PACIFIC TERMINAL CO.'S ELEVATOR, Galveston, Tex.	1,000,000	
BURLINGTON ELEVATOR, Peoria, Ill.	500,000	
CANADA ATLANTIC RAILWAY ELEVATOR, Coteau Landing, Que.	500,000	
HALLIDAY ELEVATOR CO.'S ELEVATOR, Cairo, Ill.	500,000	
PERE MARQUETTE RAILROAD CO.'S TRANSFER ELEVATOR, Ludington, Mich.	150,000	
GRAND TRUNK TRANSFER & CLIPPING ELEVATOR, Chicago, Ill.	100,000	
MISSOURI PACIFIC CONCRETE & WOOD ELEVATOR, Kansas City	1,000,000	
GOEMANN GRAIN CO.'S TRANSFER ELEVATOR, Mansfield, Ohio	100,000	
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OF ALL KINDS OF

## GRAIN ELEVATORS.

# Witherspoon = Englars Company

*Designers and Builders  
of*

## Fireproof Grain Elevators

Designs and Estimates promptly  
furnished for all kinds of build-  
ings for the handling and storage  
of grain in any locality.

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### COMPLETE Grain Elevators and Flour Milling Plants

Designed, erected and equipped ready for operation.  
PLANS drawn to suit any location and ESTIMATES  
SUBMITTED. Elevators built in either steel, wood  
or combination materials.

#### STEEL FIREPROOF ELEVATORS A SPECIALTY

Write for my late Illustrated Catalog on Grain Elevators.  
It will interest you. Correspondence Solicited

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Architect and Mechanical Engineer

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### Grain Elevators of Steel,

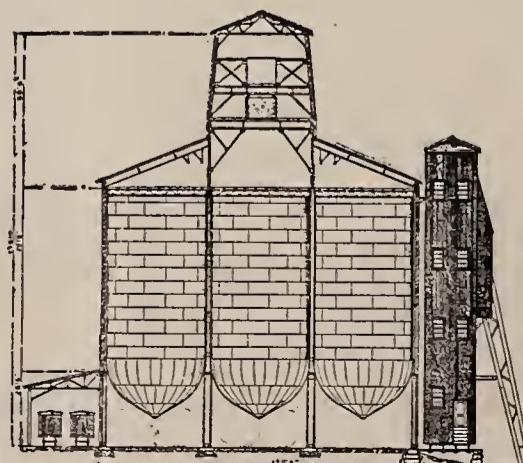
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Every Description.

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Cross-section of Great Northern Elevator furnished by  
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Steel throughout.

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in all parts of the world.*

STEEL      BRICK      WOOD  
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Fireproof  
Brick  
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A Specialty

Country or Terminal Elevators  
in any Design or Capacity

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On Belt Line connecting with  
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Successors to HONSTAIN BROS., Contractors and Builders of  
**GRAIN ELEVATORS**



Exchange Elevator built by G. T. Honstain, Minneapolis.  
Fireproof storage capacity 250,000 bushels.  
Working house capacity 150,000 bushels.

518 Corn Exchange Bldg.  
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Four hundred country elevators from 10,000 to 50,000.

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General Contractors and Designers of Grain Elevators, Mill Buildings, Docks and Warehouses.

We are prepared to use all of the various kinds of elevator construction, but recommend our special construction known as the Record-Johnson System Patent Fireproof Semi-Porus and Glazed Cellular Tile Grain Storage Construction, covered by the following patents and which we have exclusive control: Patents Nos 664323, 664324, 664325, 692544, 713104.



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C. St. P. & O. Ry. Co., Itasca, 1,125,000	Grand Trunk Elevator, Portland, Me., 1,000,000
Belt Line Elevator, Superior, 2,500,000	F. H. Peavey & Co., No. 1, 1,750,000
Superior Terminal, Superior, 2,500,000	Interstate Elevator, Minneapolis, 1,000,000
Pittsburg & West Ry., Fairport, O., 1,000,000	Texas Pacific Ry. Co., Westwego, La., 1,000,000
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Empire Elevator Co., Minneapolis, 2,500,000	And hundreds of smaller houses.

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three or four months for an elevator if you give us your contract.

### WE DON'T LOSE ANY TIME

in buying our material; we know where to buy it and buy it right and quick.

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and makes you a friend of ours.

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ANY STYLE AND CAPACITY  
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We will be pleased to send you plans,  
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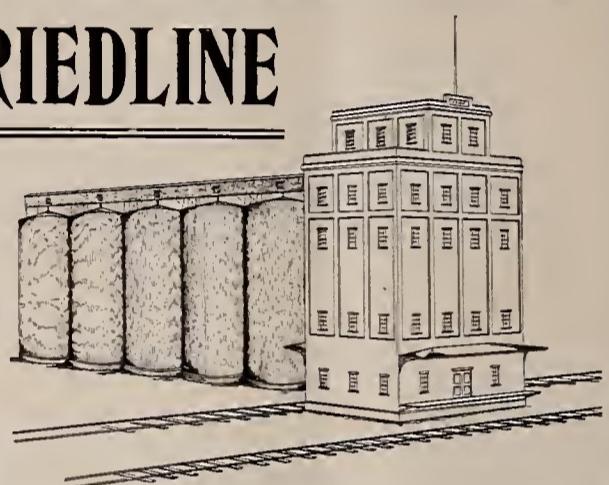
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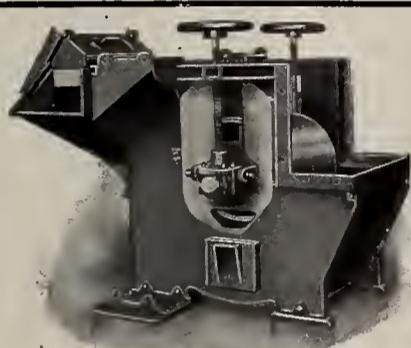
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16-inch pulley—16-inch face.  
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because grain cannot be fed into them regularly and uniformly. No manual skill is equal to all emergencies, but with the

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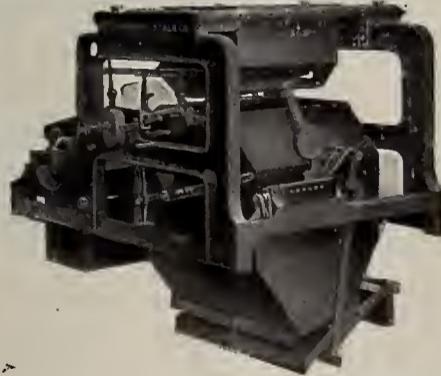
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Reliable,  
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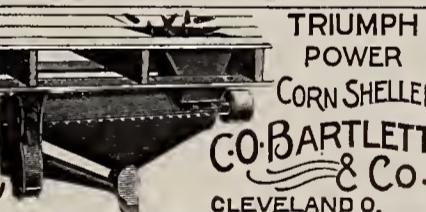
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No more work climbing stairs. Cost no more than stairways and take up one-quarter the room.

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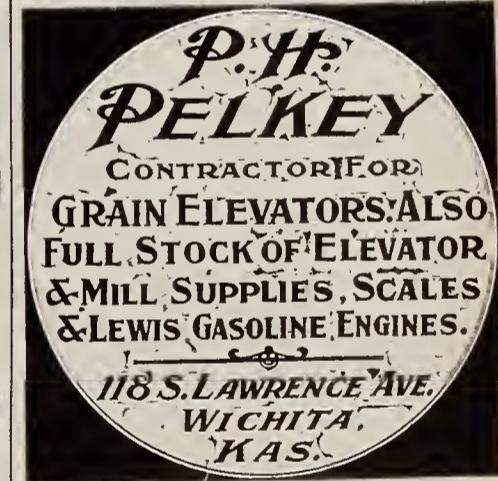


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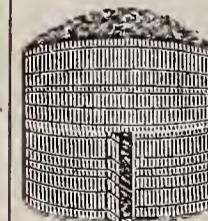
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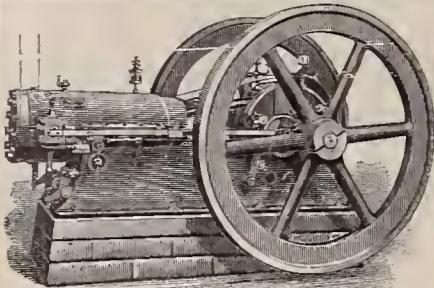
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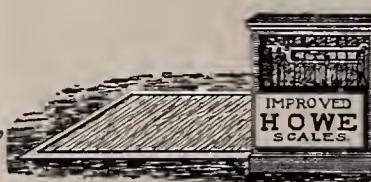
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A "WANT AD" in the "AMERICAN ELEVATOR AND GRAIN TRADE" will do the business.

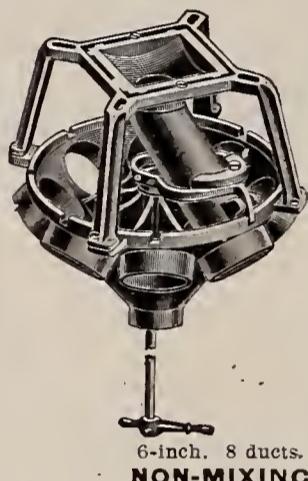
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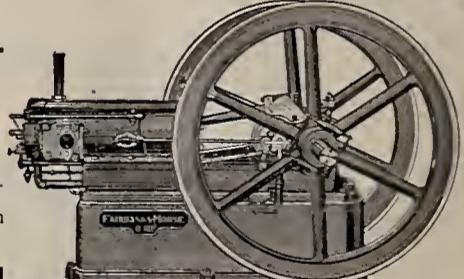
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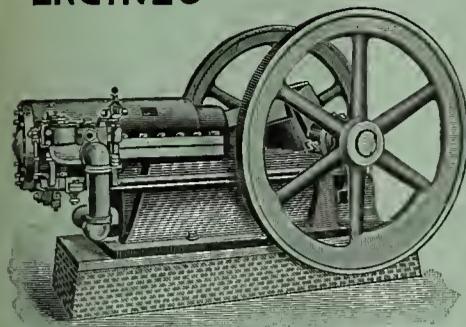


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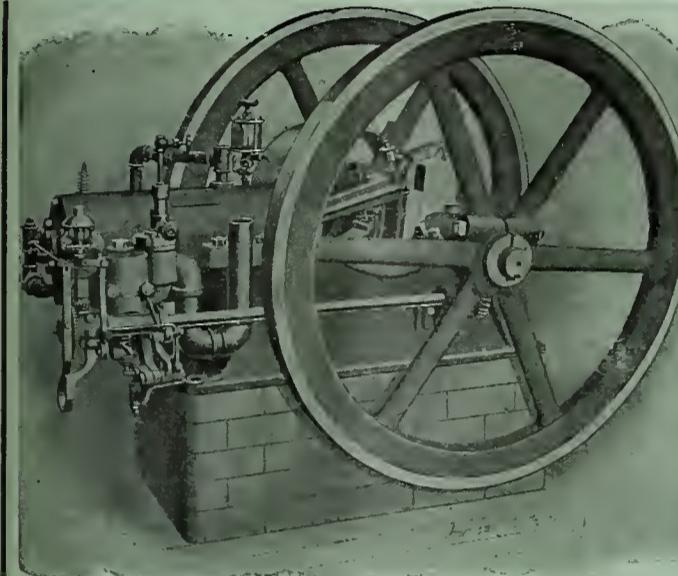
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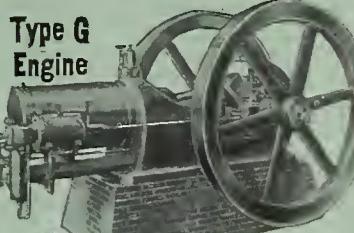
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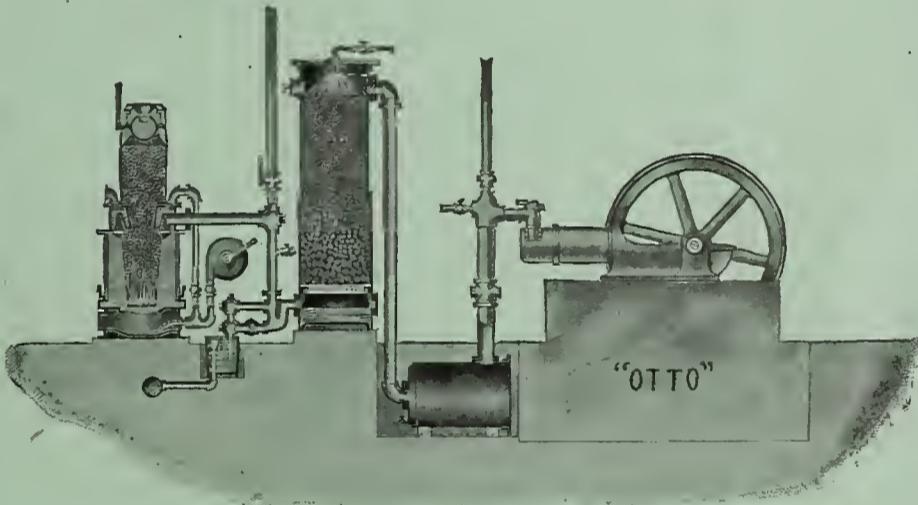
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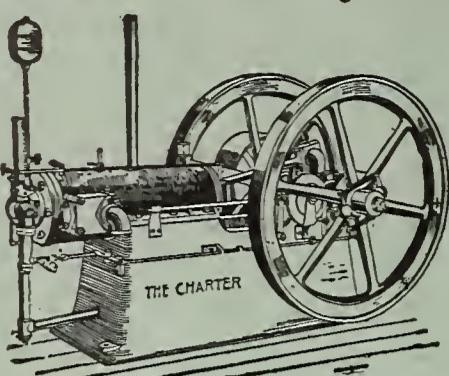
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Stationaries  
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that has *NOT CHANGED* during the past 20 years, and that is

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We say "relative" because, while the "Charter" has always been the best in quality, yet the standard of quality and the character of the material have changed, so the quality of the "Charter" is far ahead of what it was; and it was good then, judging by the number of the early engine's still in use and the reports on them.

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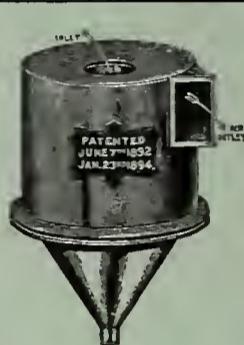
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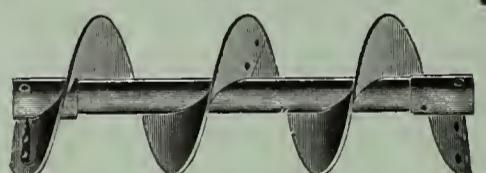
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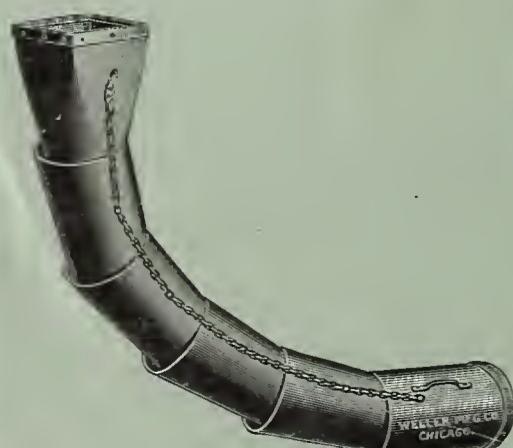


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Flexible Spouts  
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SEND US YOUR LIST OF MACHINERY AND WE WILL FORWARD YOU A NET PRICE BY RETURN MAIL

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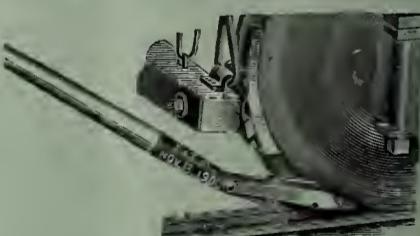
See Ad., Page 61

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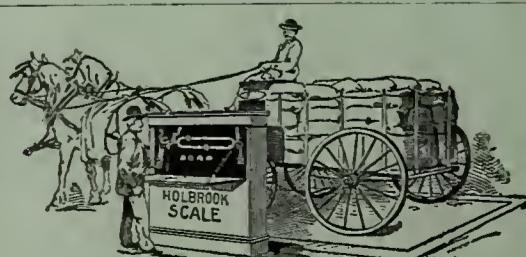
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